



Developing Healthy People 2030: Target Setting

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Presentation Outline

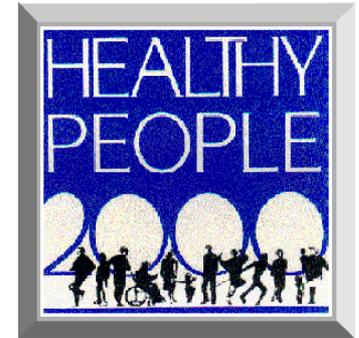
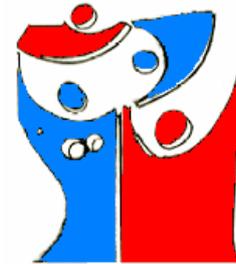
1. Overview and NCHS Role in Healthy People 2030 Development
2. History of Healthy People Target Setting
3. Methods for HP2030
4. Next Steps and Questions for Discussion

Overview and NCHS Role in Healthy People 2030 Development Process

What is Healthy People?

- Provides a strategic framework for a **national prevention agenda** that communicates a vision for improving health and achieving health equity
- Identifies science-based, **measurable objectives with targets** to be achieved by the end of the decade
- Requires tracking of **data-driven outcomes** to monitor progress and to motivate, guide, and focus action
- Offers model for international, state, and local **program planning**

HEALTHY PEOPLE
The Surgeon General's Report On
Health Promotion And Disease Prevention



DEVELOPING
HealthyPeople
2030

The NCHS/Healthy People Partnership

- Healthy People gains
 - Statistical and methodological expertise
 - Data for about ~40% of objectives
 - Data curation, standardization
 - A cross-cutting perspective: internal consistency, balance
 - Statistical imprimatur
- NCHS gains
 - Statistical advisor role/agency mission
 - Increased exposure across HHS, the federal government, and beyond
 - Expertise in a variety of data systems
 - Harmonization of health measures and specifications
 - Policy perspective, relevance

NCHS Contributed to the Healthy People 2030 Development Process by Providing Input on ...

■ Key Overarching Concepts

- Frameworks for organizing topics and objectives
- Domains
 - Foundation Health Measures
 - Health Disparities
 - Social Determinants
- Role of state and local data
- Centralization and decentralization

■ Key Healthy People Components

- Topic areas: Characteristics, frameworks
- Objectives: Purpose, structure, consistency
- Selection criteria: Definitions, operationalization, prioritization
- Data Sources: National representativeness, appropriateness for use
- Target Setting

Objective Development Steps

- FIW Reviews Core Objective Proposals
- ODPHP/NCHS Analysis
- Objective Review Subgroup
- FIW Approval
- Public Comment
- Establish Targets and Review Public Comments
- Departmental Clearance
- Launch

Target Setting

Why Set Targets?



The inclusion of quantifiable targets distinguishes Healthy People from the many Federal health indicator efforts that have been developed in past 40 years.

- Inspired in the 1970s by the Management by Objectives Movement which emphasized setting of objectives
- The examination of data relative to targets is considered critical to the usefulness of Healthy People
 - Targets communicate policy expectations, expert or evidence-based recommendations, to a wide range of stakeholders
 - Targets offer a marker for assessing progress
 - for each objective
 - for the initiative as a whole

How are Targets Set?

- Targets are set by Topic Area workgroups comprised of agency representatives and policy and subject matter experts.
- They are approved by a Federal Interagency Workgroup.
- Healthy People targets reflect subject matter, policy, and political considerations and are, therefore, not strictly statistical constructs.
- The Department's vision for Healthy People targets is that they be challenging, yet achievable.
- NCHS' role in target setting over the decades is to:
 - Provide technical assistance on statistical matters
 - Promote consistency in target-setting methods
 - Address Departmental interests in using targets to assess progress across topic areas over time and at the Midcourse and Final Reviews.

Target Setting Over the Decades (1990–2010)

- 1990s: **Expert opinion.** No systematic process across objectives
- 2000s: Expert opinion and **to address the new goal of reducing health disparities, targets for high-risk subgroups were set to achieve a greater % change than for the total population.**
- 2010s: **To reflect the elevation of the HP Goal from reduce to eliminate disparities, Better than the Best (BTTB) target-setting method (TSM) was developed.**
 - A single target for population-based objectives was set as BTTB racial/ethnic group baseline rate and applied to all subgroups (except age).
 - How much “better” was left to the discretion of the workgroups based on expert opinion.
 - BTTB was used for nearly half the objectives.

Target Setting for Healthy People 2020

- HP2020 has more than 1,000 objectives with targets.
- TSMs were modified to reflect the desire to:
 - Be more scientific, systematic, and consistent across objectives.
 - Have a reasonable expectation of greater success than in previous decades.
- NCHS analysis of HP2010 TSMs led the department to recommend:
 - Evidence- or science-based methods (e.g., **modeling/projection/trend analysis**) where possible, and
 - **A standard default** method when evidence- or science-based methods infeasible.
 - Default standard set at **10% improvement**.
 - More than ½ of objectives used the standard default.

Methods for HP2030

Background: HP2030 Targets

- HP2030 aims for greater transparency, and a more systematic approach, in target setting.
 - Allows for replication of TSMs at the state and local level.
 - Allows for targets to be considered using data-driven tools.
- Continuing the vision of Healthy People 2020, HP2030 targets are meant to be challenging, yet achievable.
- The target should be a statistically significant improvement from the baseline, whenever possible.
- The targeted change from the baseline should be consistent with the desired direction (e.g., even if obesity rate is expected to worsen, target should be to improve it or maintain baseline).

Process: Target Setting

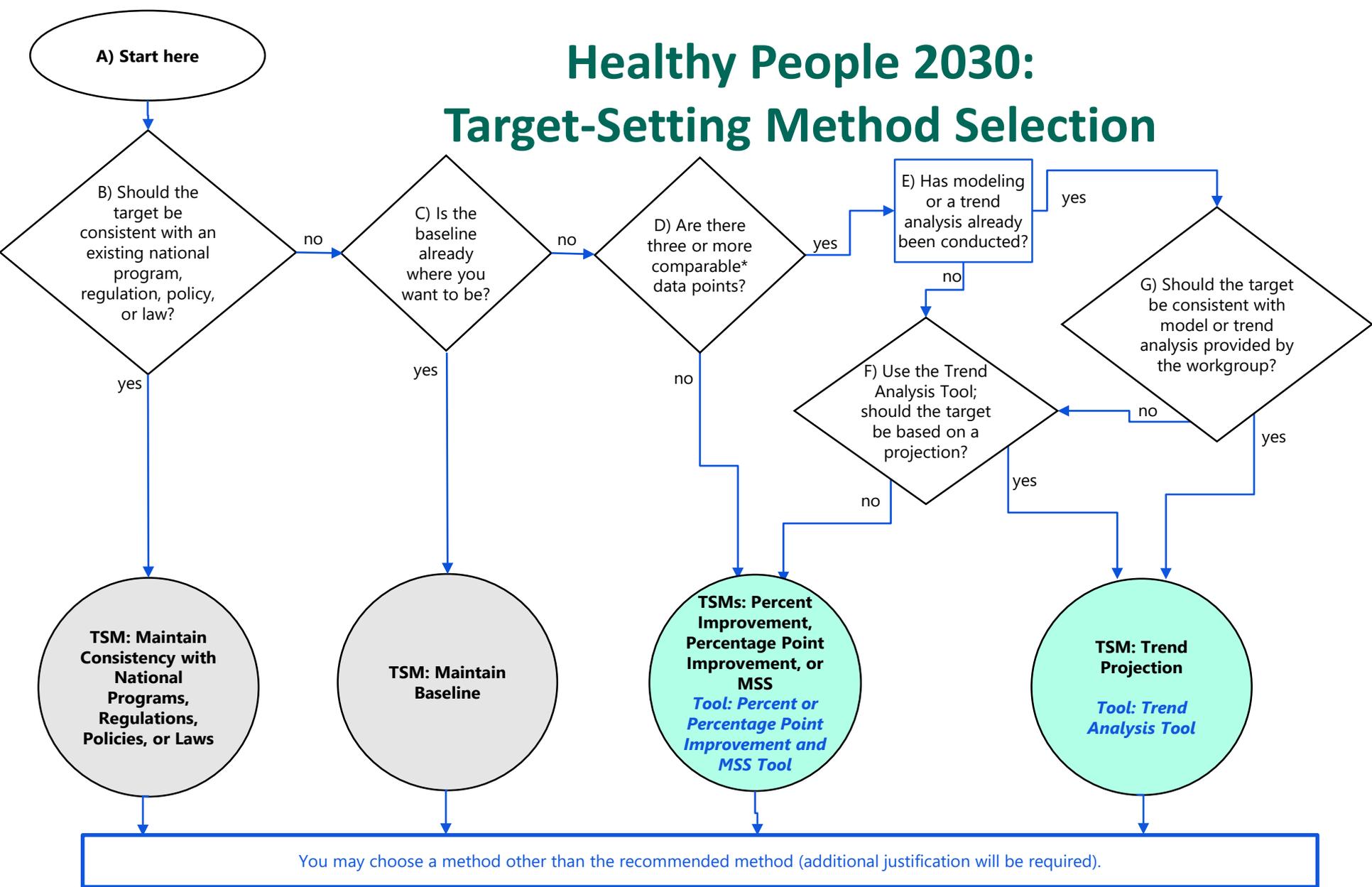
- The TSM flowchart helped Healthy People Topic Area subject matter experts use an explicit process to arrive at a recommended target-setting method.

- HP2030 Target-Setting Methods include:
 - Maintain consistency with national programs, regulations, policies, or laws
 - Maintain baseline
 - Percent improvement
 - Percentage point improvement
 - Minimal statistical significance
 - Trend projection

- New NCHS Tools were created to help workgroups select among candidate targets generated using the last four methods.

- Healthy People targets will still reflect subject matter, policy, and political considerations and are, therefore, not strictly statistical constructs.

Healthy People 2030: Target-Setting Method Selection



*Data points are considered comparable if the data were collected using the same data system, methods, and question(s). See Trend Analysis Tool and Trend Analysis Tool Instructions for more information.

TSM: Maintain Consistency with National Programs, Regulations, Policies, or Laws

- Used when there is an existing national or recommendation, policy or program goal; or where the target is in regulation or statute.

- **Example:**
 - **Hypothetical Objective 1:** Increase vaccination coverage for vaccine series A
 - **Baseline:** 80.0% of persons received the recommended doses of vaccine series A in 2017.
 - **Target:** 90.0%

 - **Explanation:** This target is based on:
 - Section 317 of the Public Health Service Act
 - Advisory Committee on Immunization Practices (ACIP) Vaccine Recommendations immunization schedule for children

TSM: Maintain Baseline

- Used if the goal is to maintain a current level and that level is the baseline.
- **Example:**
 - **Hypothetical Objective 2:** Reduce deaths due to condition B
 - **Baseline:** 20.0 deaths due to condition B per 100,000 population (age-adjusted) occurred in 2017.
 - **Target:** 20.0 per 100,000 population
 - **Explanation:** While a reduction in deaths due to condition B would be ideal, there has been a steady increase in deaths due to condition B over the past several years. Thus, maintaining the baseline would confer great public health benefit.

TSMs: Percent Improvement, Percentage Point Improvement, or Minimal Statistical Significance (MSS)

The NCHS tool calculates candidate targets based on the baseline value and SE, if available:

1. Percent Improvement (for rates and other quantities)*

- Two candidate targets are calculated, based on either 10 or 20 percent improvement from the baseline value.

2. Percentage Point Improvement (for percentages only)*

- Two candidate targets are calculated, based on either 1–5 or 1–10 percentage points improvement from the baseline value.
 - *Tool calculates exact value for targeted change using Cohen's h effect size.*

3. Minimal Statistical Significance (MSS)

- Candidate target is calculated based on MSS criterion:

$$\text{Baseline} \pm 1.96\sqrt{2} * SE$$

- *Used when baseline SE is available*
- *Assumes SE at target is equal to baseline SE*

**Generally speaking, candidate target values that are not statistically significantly different from baseline should not be selected.*

Example of a Percentage Point Improvement TSM

- **Hypothetical Objective 3:** Increase the proportion of adults who receive screening C
- **Baseline:** 50.0 percent of adults received screening C based on the most recent guidelines in 2017 (age adjusted to the year 2000 standard population)
- **Target:** 60.0 percent of adults
- **Explanation:**
 - The workgroup selected the percentage point improvement TSM for the calculated target; from the trend analysis, the slope of the line was not statistically significant.
 - Two candidate targets and the MSS value were provided by the tool.
 - The workgroup chose the more aspirational of the two candidate percentage point improvement targets given historical observed improvements and improving technology related to screening C.

TSM: Trend Projection

- The NCHS **Trend Analysis Tool** helps workgroups analyze historical data to determine if a trend is present and can be used to set a target.
 - Fits a weighted least squares (LS) trend line based on the historical data provided by the workgroup (when SEs are not available, ordinary LS is used).
 - Up to five **candidate target values** are calculated from the 25%, 33%, 50%, 67%, and 75% one-sided prediction intervals for the desired target year(s).
- **Considerations**
 - Is there evidence to support any of the proposed candidate targets?
 - Does the historical data have a change in trend?
 - Workgroup should consider other target-setting methods whenever:
 - Tool fails to find a suitable candidate target value (e.g., trend is not statistically significant or candidate values out of bound), or
 - Trend is opposite to the desired direction.

Trend Analysis Tool Example

- **Hypothetical Objective 4:** Reduce prevalence of condition D
- **Baseline:** 20.0 percent of adults had condition D in 2013-2016 (age adjusted to the year 2000 standard population)
- **Target:** 15.0 percent
- **Explanation:**
 - All five candidate target values were provided by the Trend Analysis Tool.
 - No additional information can be used to assess the trend line, so the median of the five candidate target values was selected (50% one-sided prediction interval).

Target Setting Takeaways

- Target setting has been the central feature of HP since its inception.
- Targets are still policy decisions made by the Healthy People workgroups.
- Initially targets were set largely or almost exclusively by expert opinion.
- Over the decades, TSMs have become more systematic and consistent but still are somewhat variable across objectives, and most still encompass expert judgement.
- Greater transparency in HP2030 will allow for other organizations to replicate national TSMs as appropriate and desired.

Next Steps and Items for Discussion

Next Steps

HP2030	HP2020
Departmental clearance	Data updates; LHI releases
Launch data templates, production, and verification	Finalization of HP2020 final data
Finalization of HP2030 launch data	Archiving HP2020
Launch of HP2030	HP2020 Executive Summary
Launch of HP2030 LHIs	HP2020 Final Review

Questions for Discussion

1. Given the history of Healthy People target setting and direction Healthy People 2030 is going, what reactions and recommendations does the Committee have?
2. How can we leverage our longstanding contributions to the Healthy People initiative to the benefit of NCHS?
3. What is the best way to focus HP2030 data products throughout the decade?
4. What are areas of focus for research planning and/or technical assistance for HP2030?
5. What data partnerships could be better leveraged by NCHS as the data and statistical advisor to Healthy People?

Thank You!

Key Websites	HPSB Staff	HPSB Contractors
<p>http://www.healthypeople.gov</p> <p>http://www.cdc.gov/nchs/healthy_people.htm</p> <p>http://www.cdc.gov/nchs/products/hp_pubs.htm</p> <p>For more information, contact CDC 1-800-CDC-INFO (232-4636) TTY: 1-888-232-6348 www.cdc.gov</p>	<p>Johanna Alfier Lesley Dobrzynski Robert Francis Leda Gurley LaJeana Hawkins Kate Hubbard Kimberly Hurvitz Elizabeth Jackson Sibeso Joyner Deepthi Kandi Mark Montgomery Cheryl Rose Asel Ryskulova Rashmi Tandon Ritu Tuteja</p>	<p>Mary Anne Freedman Richard Klein Makram Talih</p>

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

