

**Evaluation of the
South Carolina
Comprehensive Cancer Plan,
2009-2010**

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Charleston, SC**

Statewide Collaborators

- Kathleen Cartmell, MUSC
- Dr. James Hebert, USC Arnold School of Public Health
- Dr. Virginia G. Daguise, Division of Chronic Diseases, DHEC
- Susan Bolick-Aldrich, SC Central Cancer Registry, DHEC

***“A journey of a thousand miles
begins with a single step.”***

Lao-Tzu

Chinese Philosopher, 550 BC



Background

- CDC funds state Cancer Control programs
- SC Cancer Plan published in 2005
 - Has evolved since then
- Central blueprint for cancer prevention and control activity in South Carolina
- In total, comprised of:
 - **5 goals**
 - **64 objectives**
 - **208 strategies**

Cancer Plan Overview

Chapters:

1. Health Disparities

2. Advocacy and Policy

3. Research

4. Genetics

5. Prevention

6. Early Detection

7. Patient Care

8. Survivor & Family Issues

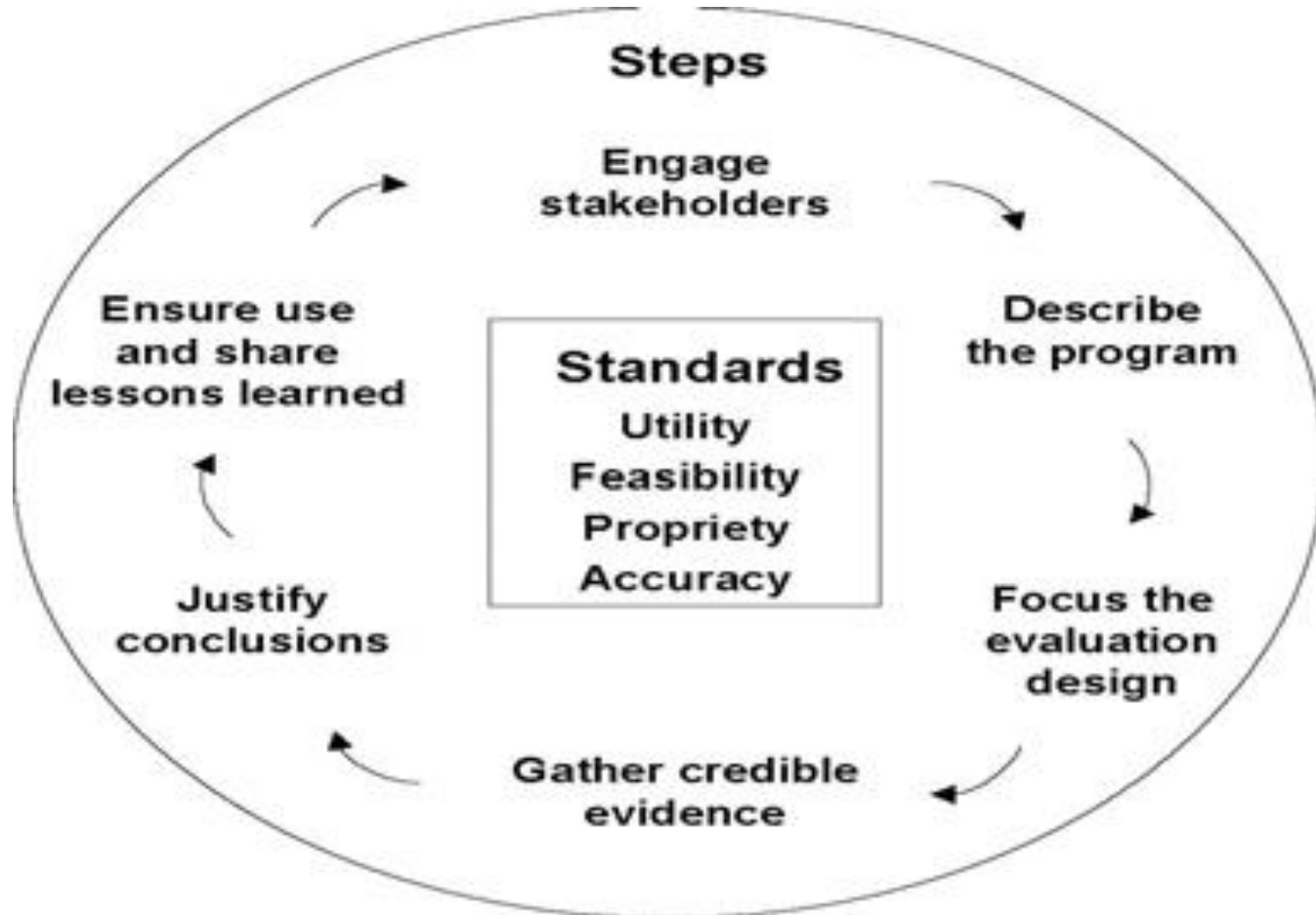
Background: Definitions

- **GOAL:** broad, overarching statement about the objectives to be achieved
- **OBJECTIVE:** specific statement about what is to be achieved; stated in measurable terms
- **STRATEGY:** specific action that will lead to accomplishing objectives

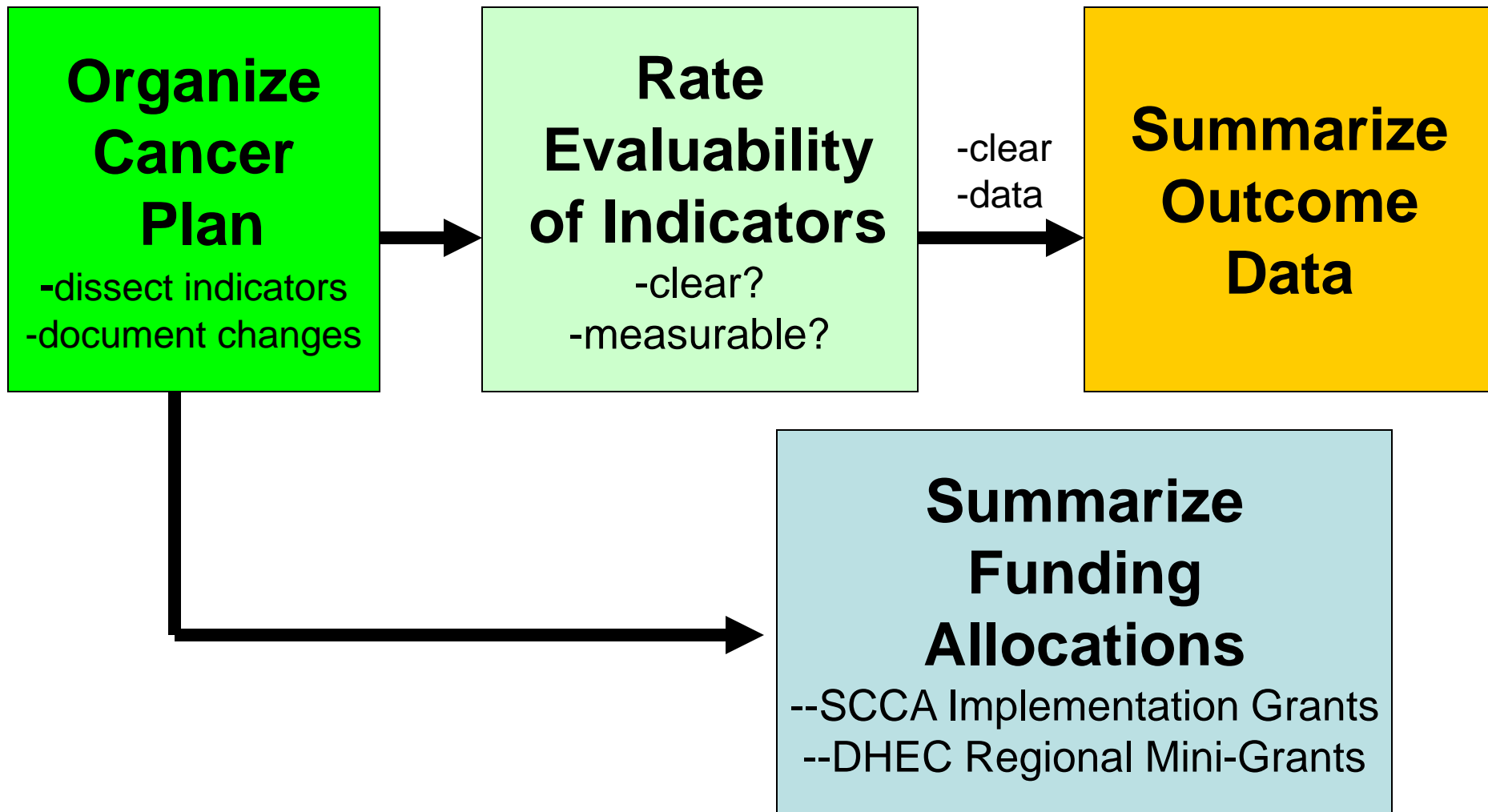
Background

- Need for thorough, rigorous evaluation framework to monitor progress toward Cancer Plan goals and objectives
- Develop and implement evaluation plan designed to ensure routine, *data-driven monitoring of progress*
- Engaged stakeholders in process

Program Evaluation Framework (CDC)



Evaluation Plan Overview



Part 1

**Rate evaluability of indicators
and summarize outcome data**

Methods: Organize Cancer Plan

- Dissect the goals, objectives, and strategies
 - Account for changes over time:
 - **1) New indicators added**
 - **2) Existing indicators modified**
 - Wording
 - Benchmark goals
 - **3) Indicators removed**

Methods: Rate Evaluability of Objectives/Strategies

-Readily evaluated as written?

- **A** = Yes
- **B** = No, minor revision required
- **C** = No, major revision required

–Were outcome data available?

- **1** = Yes
- **2** = No, secondary data collection required
- **3** = No, primary data collection required

–Duplicate reviews

Availability of Outcome Data

| Evaluate as written? | 1= data available | 2= 2 ⁰ data collection | 3= 1 ⁰ data collection |
|----------------------|-------------------|-----------------------------------|-----------------------------------|
| A= Yes | A1 | A2 | A3 |
| B= Minor revisions | B1 | B2 | B3 |
| C= Major revisions | C1 | C2 | C3 |

Let's play "Rate that indicator"

- **A1 (best) or C3 (worst)?**
Identify existing resources in communities to promote access to care in SC.

Evaluability of Indicators

Let's play "Rate that indicator"

- **A1 (best) or C3 (worst)?**

Identify existing resources in communities to promote access to care in SC.

Answer: C3

“Rate that indicator”: Round 2

- **A1 (best) or C3 (worst)?**
- By June 2015, decrease the percentage of high school students in SC using tobacco from 18% to 10%.

“Rate that indicator”: Round 2

- **A1 (best) or C3 (worst)?**

- By June 2015, decrease the percentage of high school students in SC using tobacco from 18% to 10%.

Answer: A1

Methods:

Summarize Outcome Data

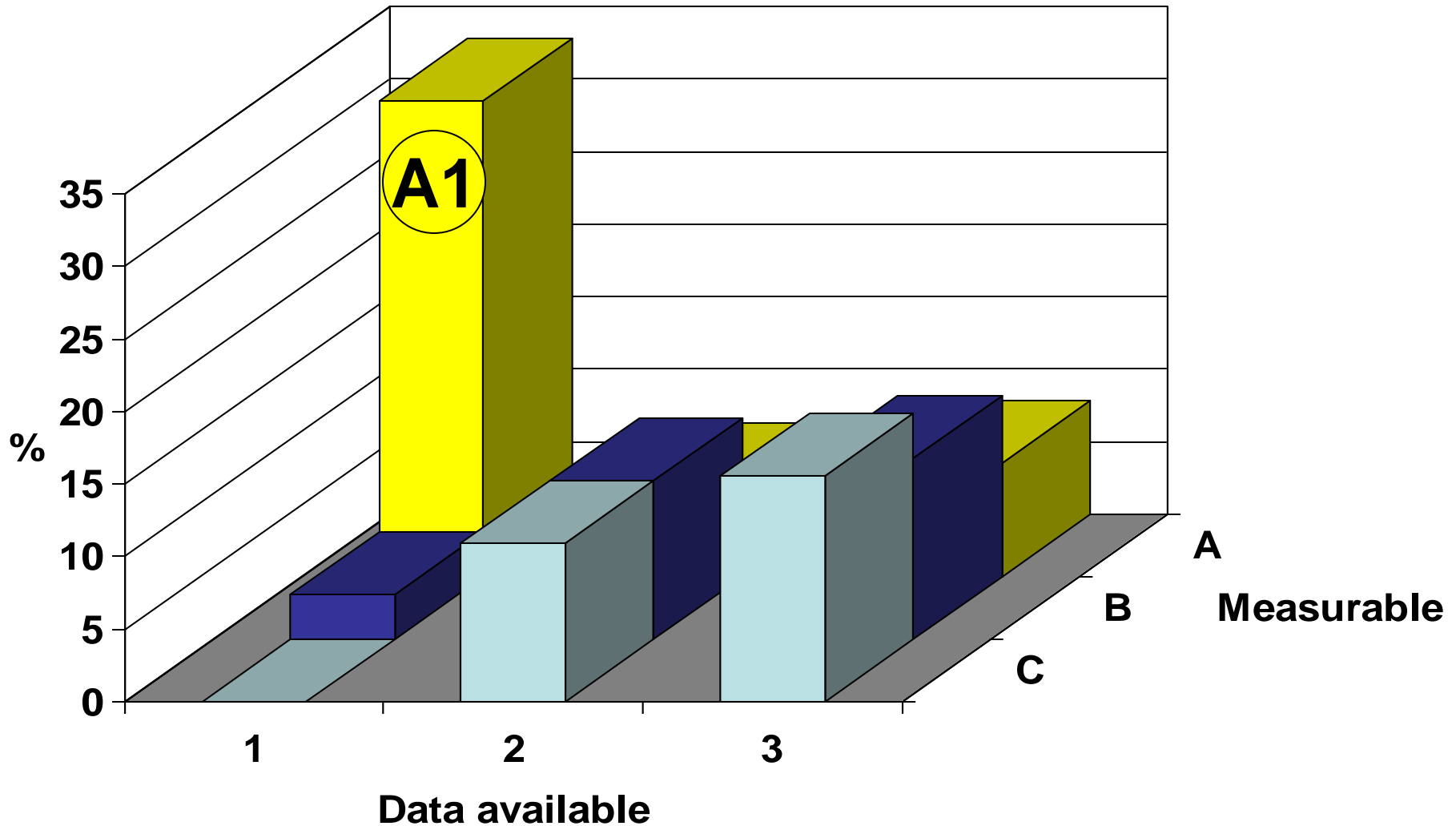
- For indicators with “**A1**” rating (clear/ precise + outcome data):
 - **Assemble existing data**, e.g., from:
 - Behavioral Risk Factor Surveillance Survey (BRFSS)
 - SC Central Cancer Registry (SCCCR)
 - **Assess whether indicator achieved**

Results: Cancer Plan Organization

- **Implemented Indicator Tracking System**
- **2 of the 8 chapters were outliers:**
 - **Disparities**
 - **Mostly compilation of disparities-related indicators from other chapters**
 - **Nearly complete overlap with indicators in other chapters**
 - **Genetics**
 - **“Orphan”--no activity**
 - **Omitted from subsequent tables**

Evaluability of Indicators

Summary of ratings of n=64 objectives



Evaluability of indicators
% “A1” strategies (n=208)

| Chapter | % Measurable |
|---------------------|--------------|
| Patient Care | 16 |
| Advocacy & Policy | 23 |
| Research | 10 |
| Prevention | 20 |
| Early Detection | 9 |
| Survivor and Family | 43 |

Total measurable: 15%

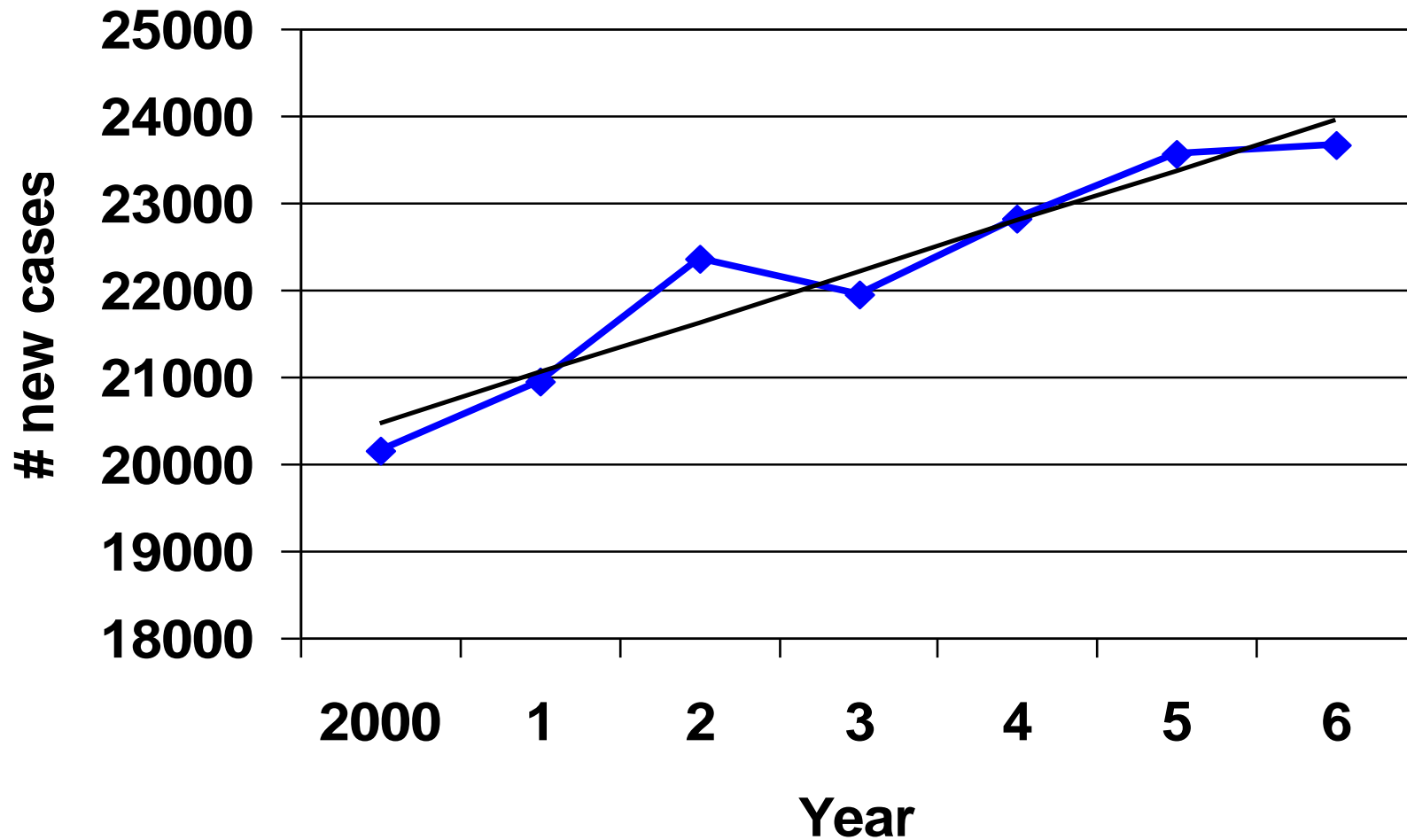
Summarize Outcome Data

Goal 1

**“Reduce the number of
new cancer cases”**

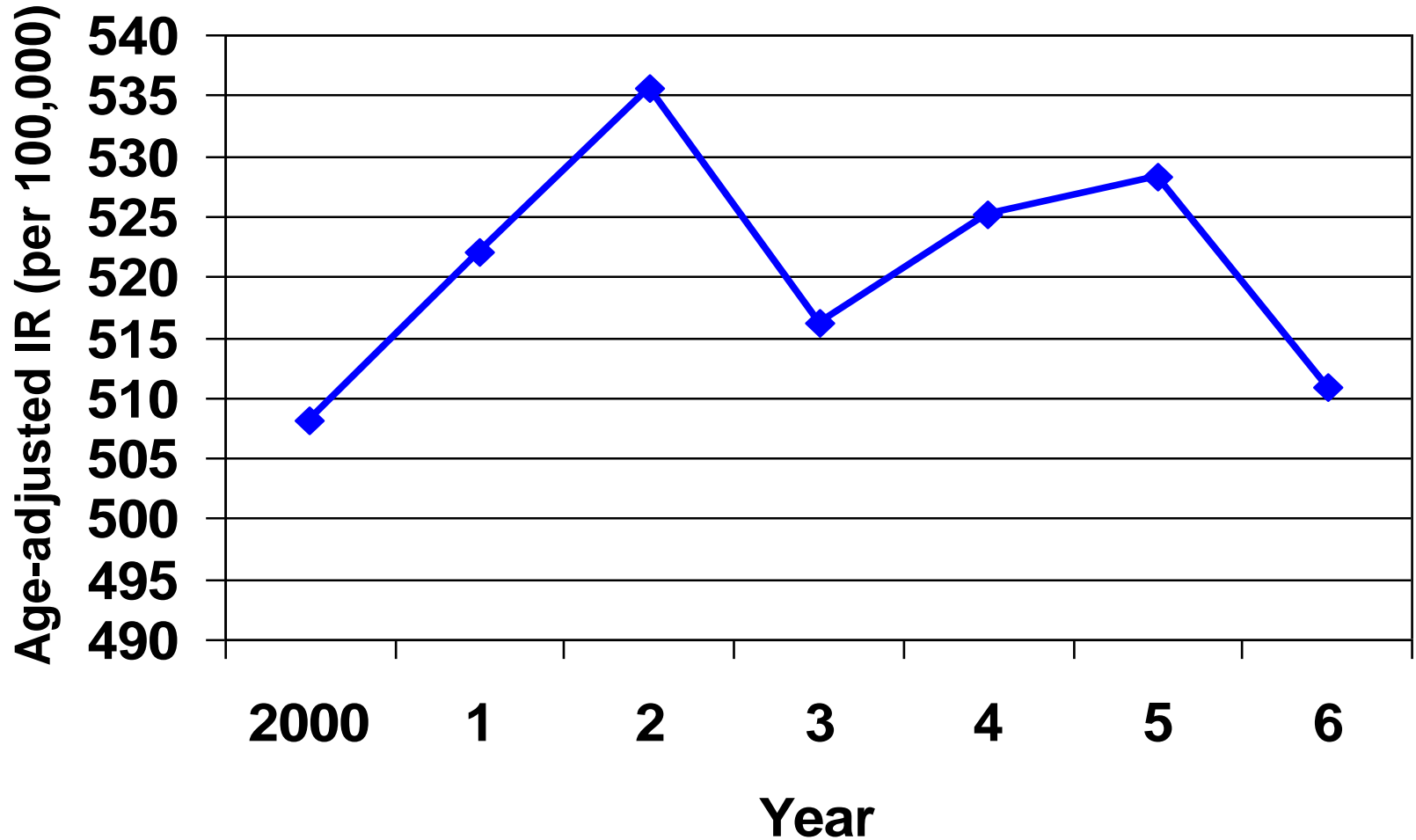
Summarize Outcome Data: Goal 1

“Reduce the # of new cancer cases”



Summarize Outcome Data: Goal 1

What does the age-adjusted cancer incidence rate show?



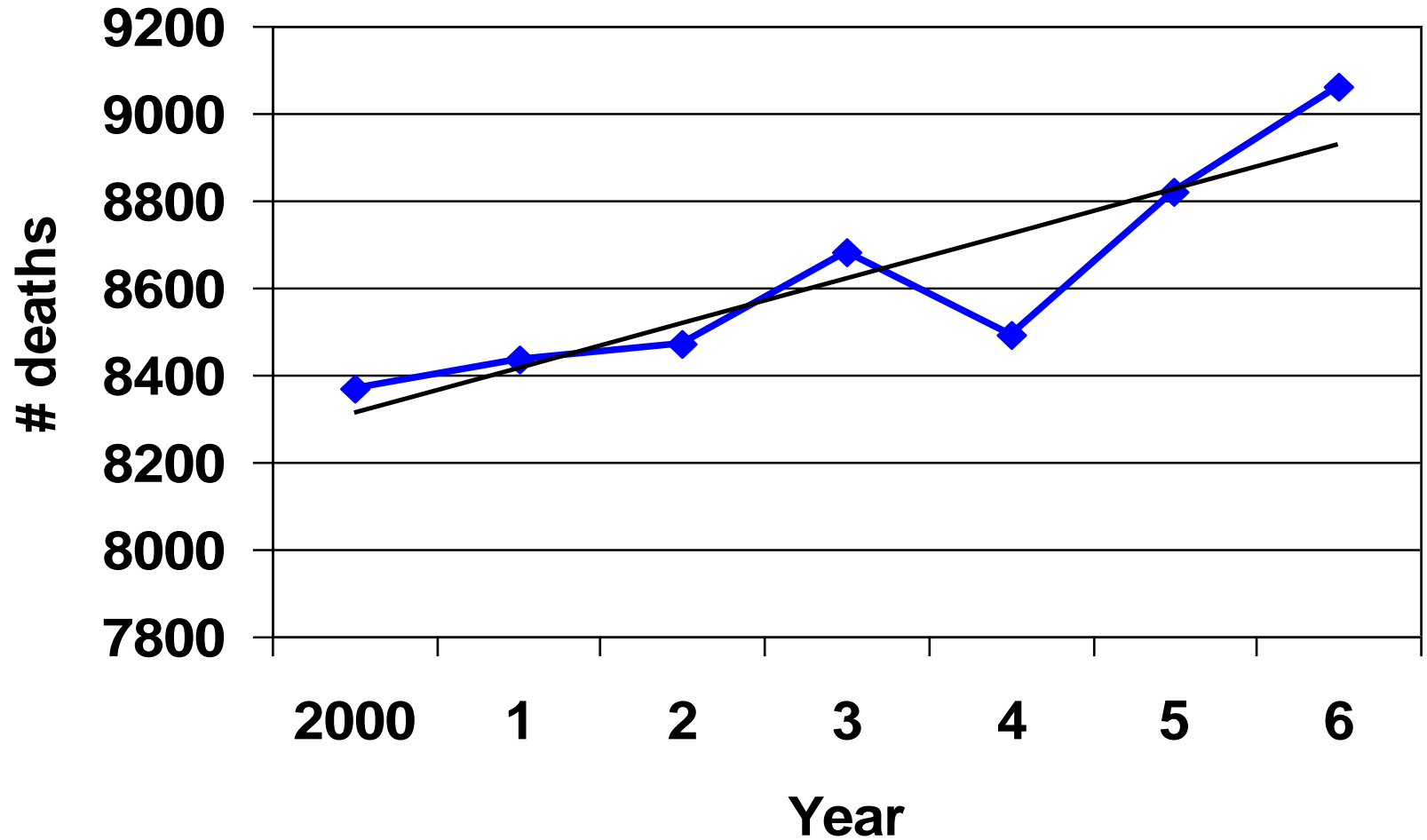
Summarize Outcome Data

Goal 2

“Reduce the number of deaths attributable to cancer”

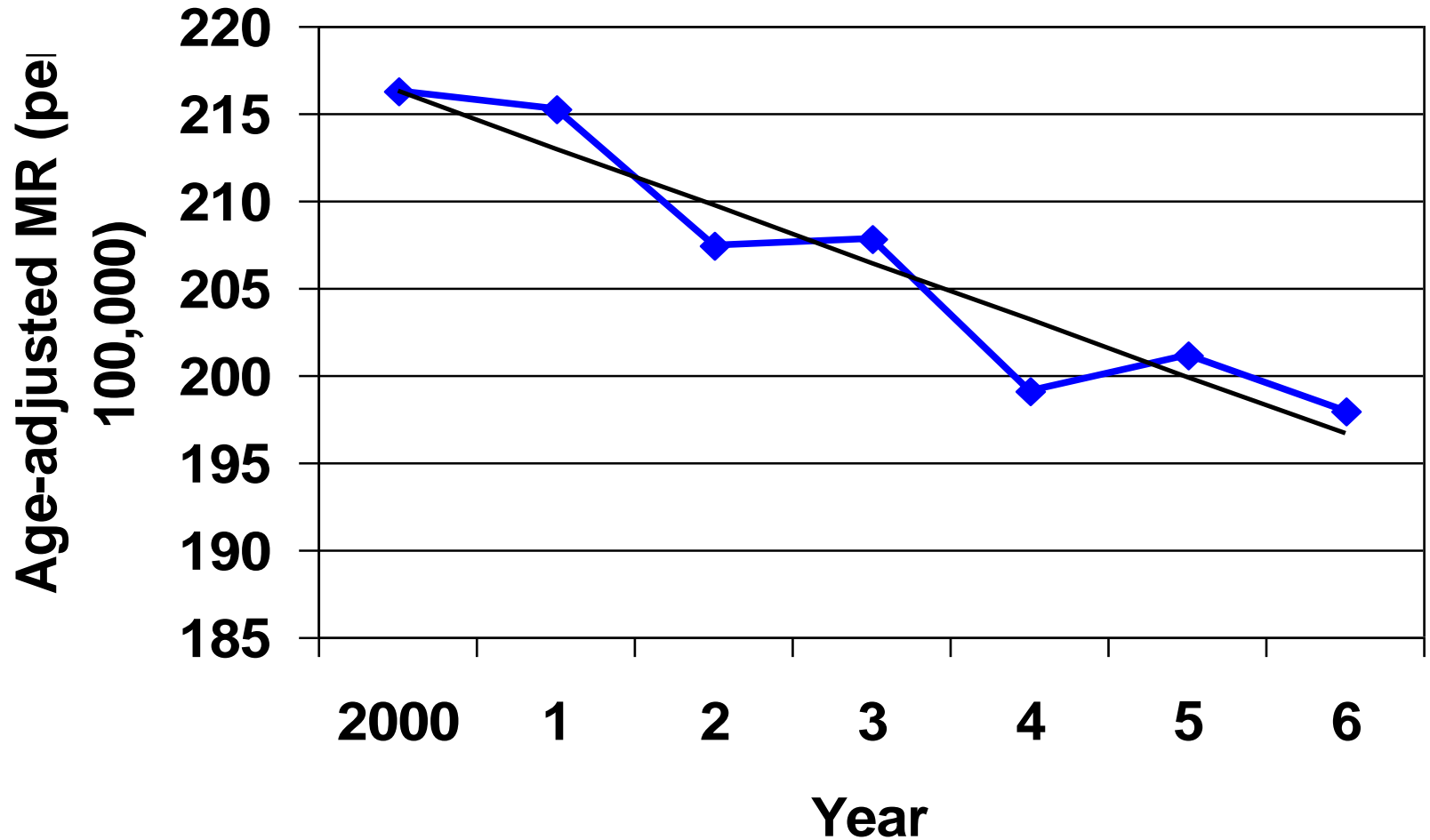
Summarize Outcome Data: Goal 2

“Reduce the # of deaths attributable to cancer”



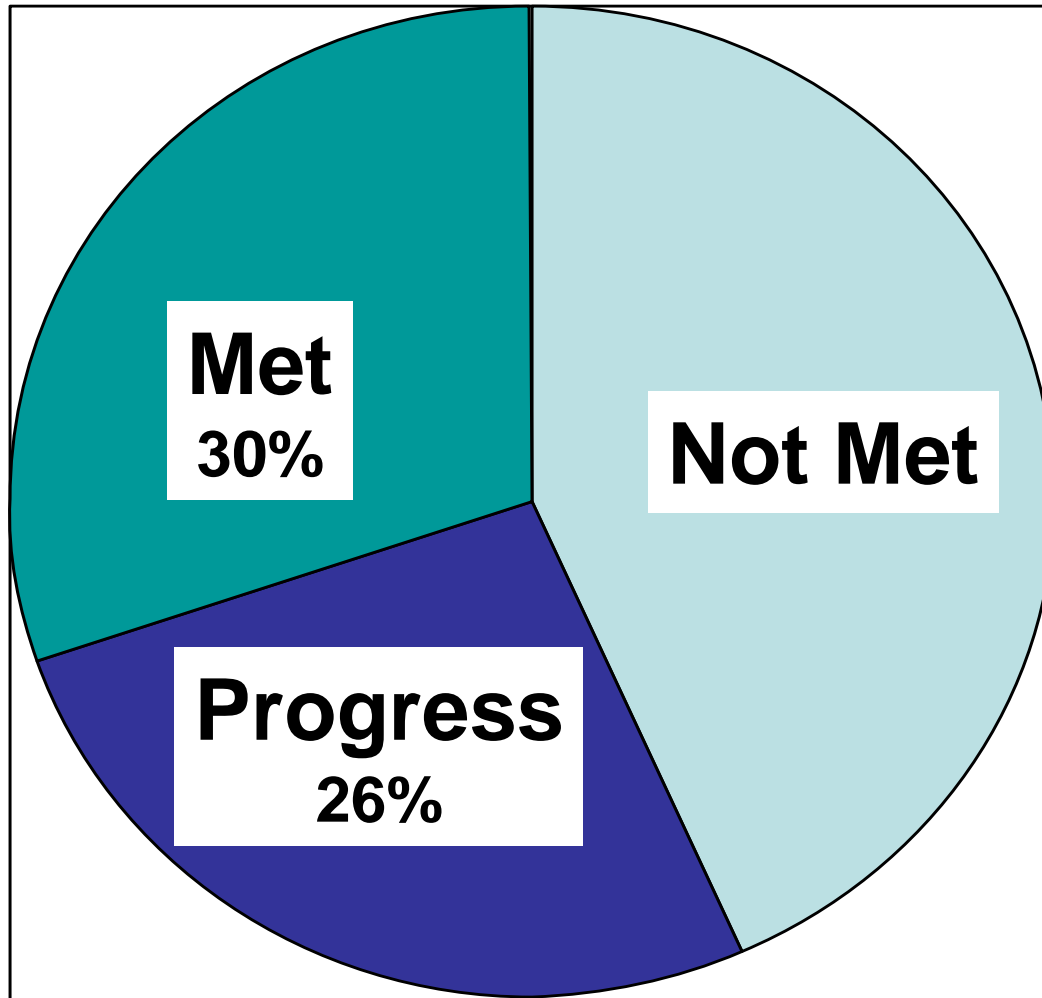
Summarize Outcome Data: Goal 2

What does the age-adjusted cancer mortality rate show?



Summarize Outcome Data

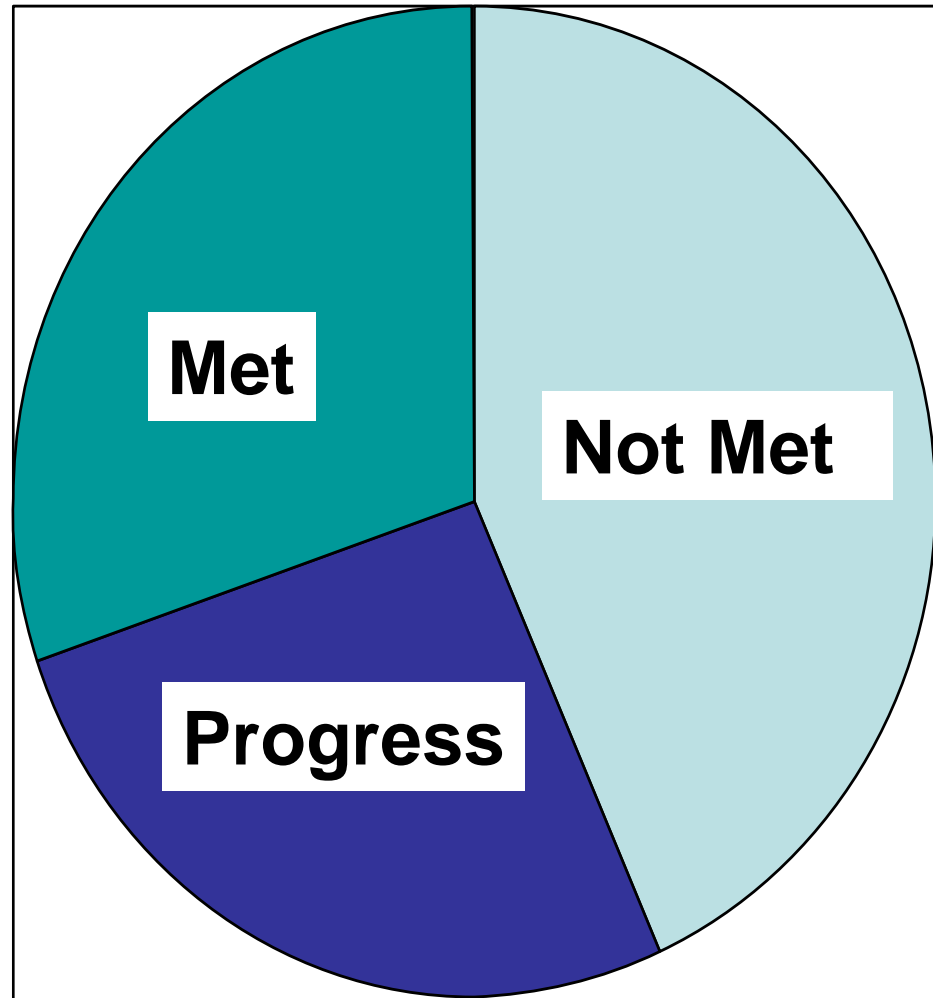
% of “A1” (n=53) indicators met



Summarize Outcome Data

% of “A1” (n=53) indicators met

30% indicators met, 26% with positive progress: Cancer prevention and control is happening in South Carolina!



Summarize Outcome Data
% Indicators met by chapter

| Chapter | % Met |
|---------------------|--------------|
| Patient Care | 13 |
| Advocacy & Policy | 56 |
| Research | 33 |
| Prevention | 17 |
| Early Detection | 25 |
| Survivor and Family | 50 |

Total met: 30%

Examples of Indicators Met

- **Advocacy and Policy**

- Cigarette tax increase, stable funding for DHEC tobacco control, extend Medicaid coverage for treatment of breast/cervical cancer to all low income uninsured women

- **Prevention**

- 100% smoke-free govt. vehicles, >10% of high school smokers in cessation programs

- **Early Detection**

- >53% (66% 2008) adults 50+ endoscopy in past 10 yrs., >75% (81% 2006) men newly diagnosed with prostate cancer with localized stage

Examples of Indicators Not Met

- **Advocacy and Policy**

- Extend Medicaid coverage for screening and treatment of CRC to indigent low income uninsured persons

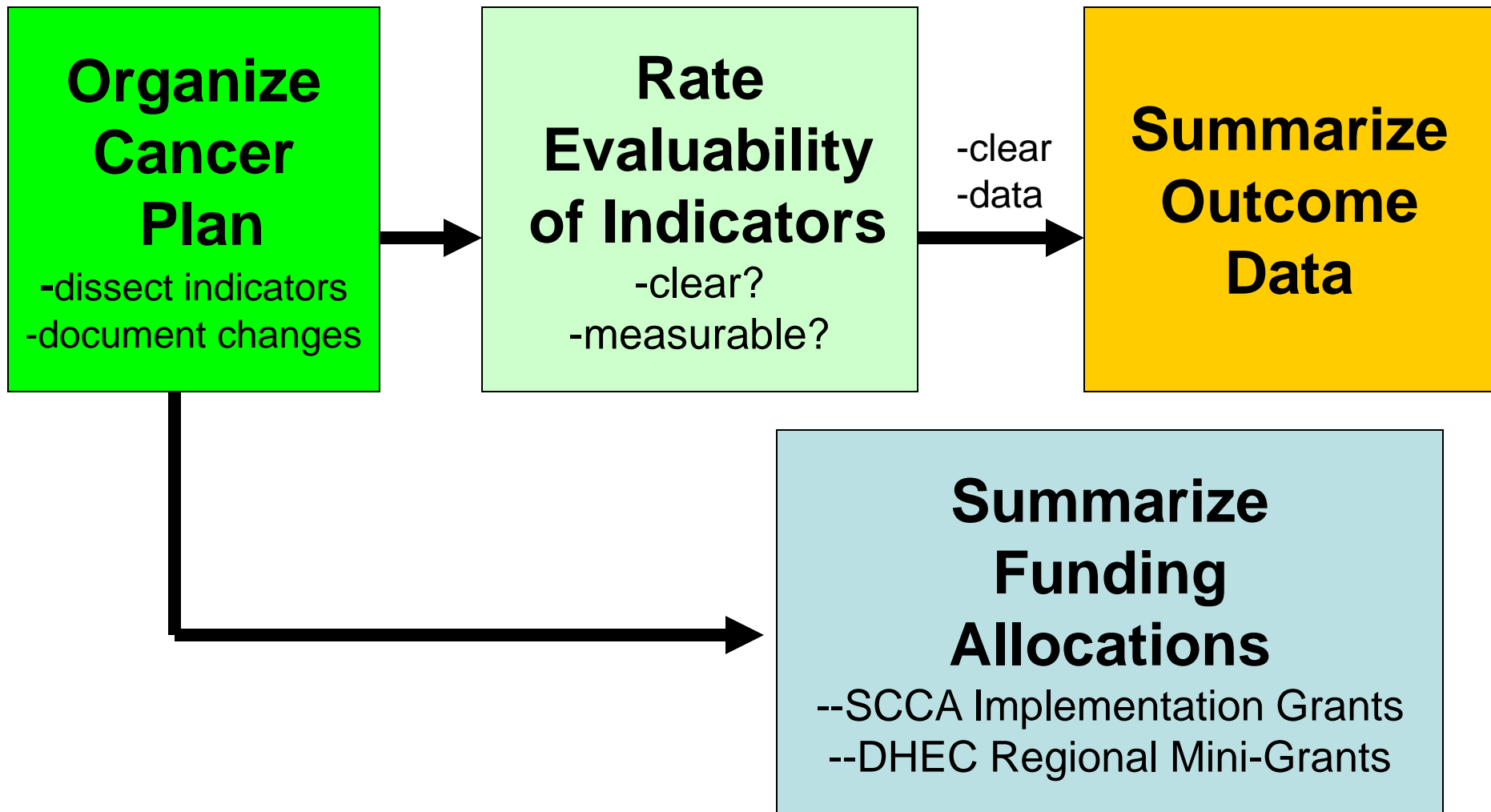
- **Prevention**

- 12% prevalence adult tobacco (22% 2007), 10% h.s. tobacco use prevalence (19% 2007), 50% “5-a-day” (19% 2007)

- **Early Detection**

- 80% (75% 2008) women 40+ mammography last 2 yrs., 90% women at risk screened for cervical cancer (86% 2008), 30% report oral examination (24% 2006)

Evaluation Plan Overview



Part 2

**Summarize funding
allocations:**

Implementation grants

DHEC regional mini-grants

SC Comprehensive Cancer Control: Funding Flow

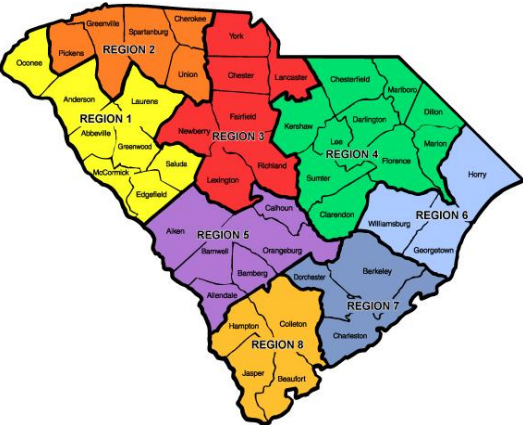
CDC

DHEC Cancer Control Program

SCCA

**DHEC Regional
Mini-Grants**

**Implementation
Grants**

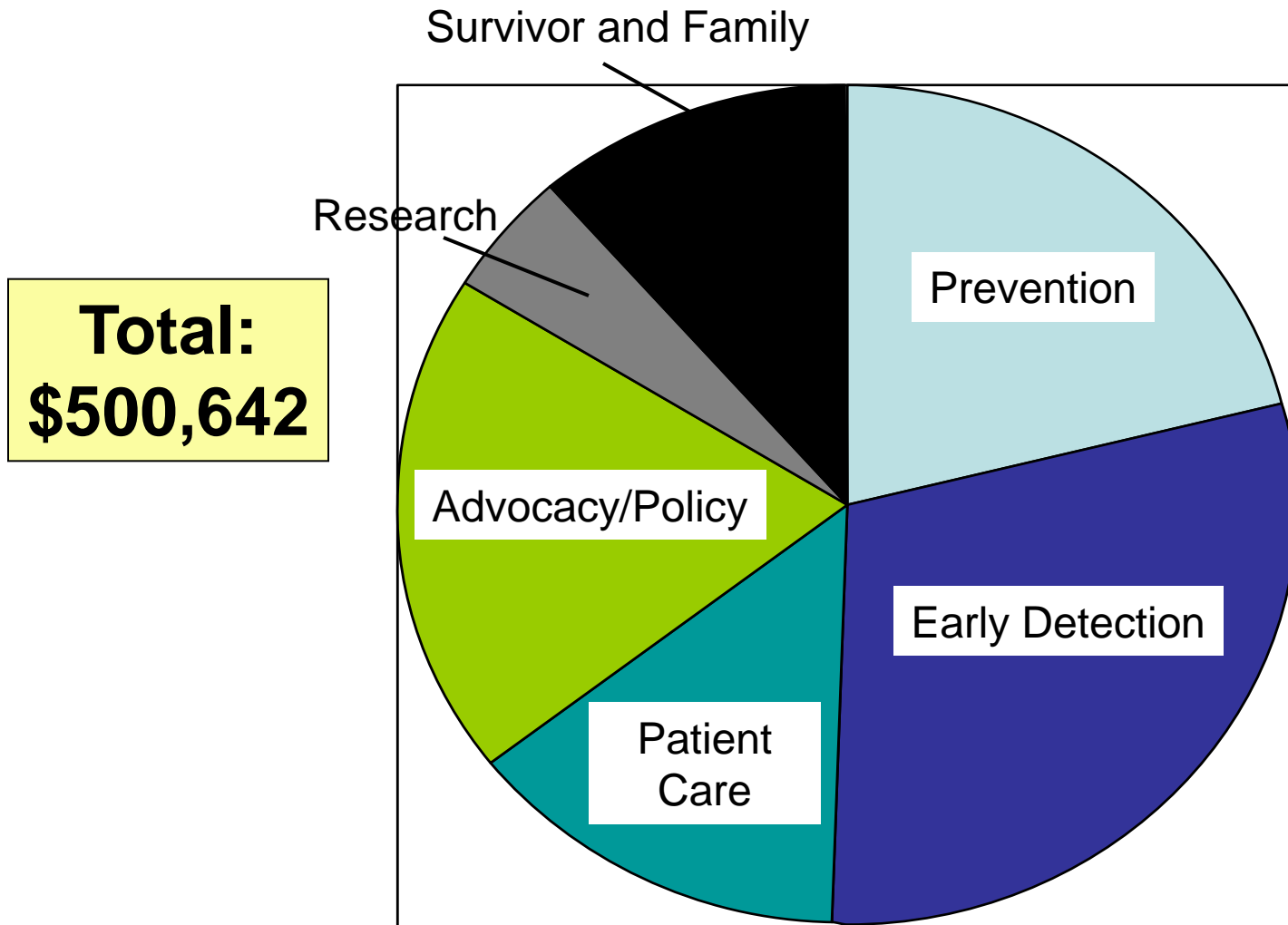


Methods: Funding Allocation

- **Collect data on funded grants**
 - SCCA Implementation Grants
 - DHEC Regional Mini-Grants
- **Summarize funding data**
 - Map funded projects back to Cancer Plan

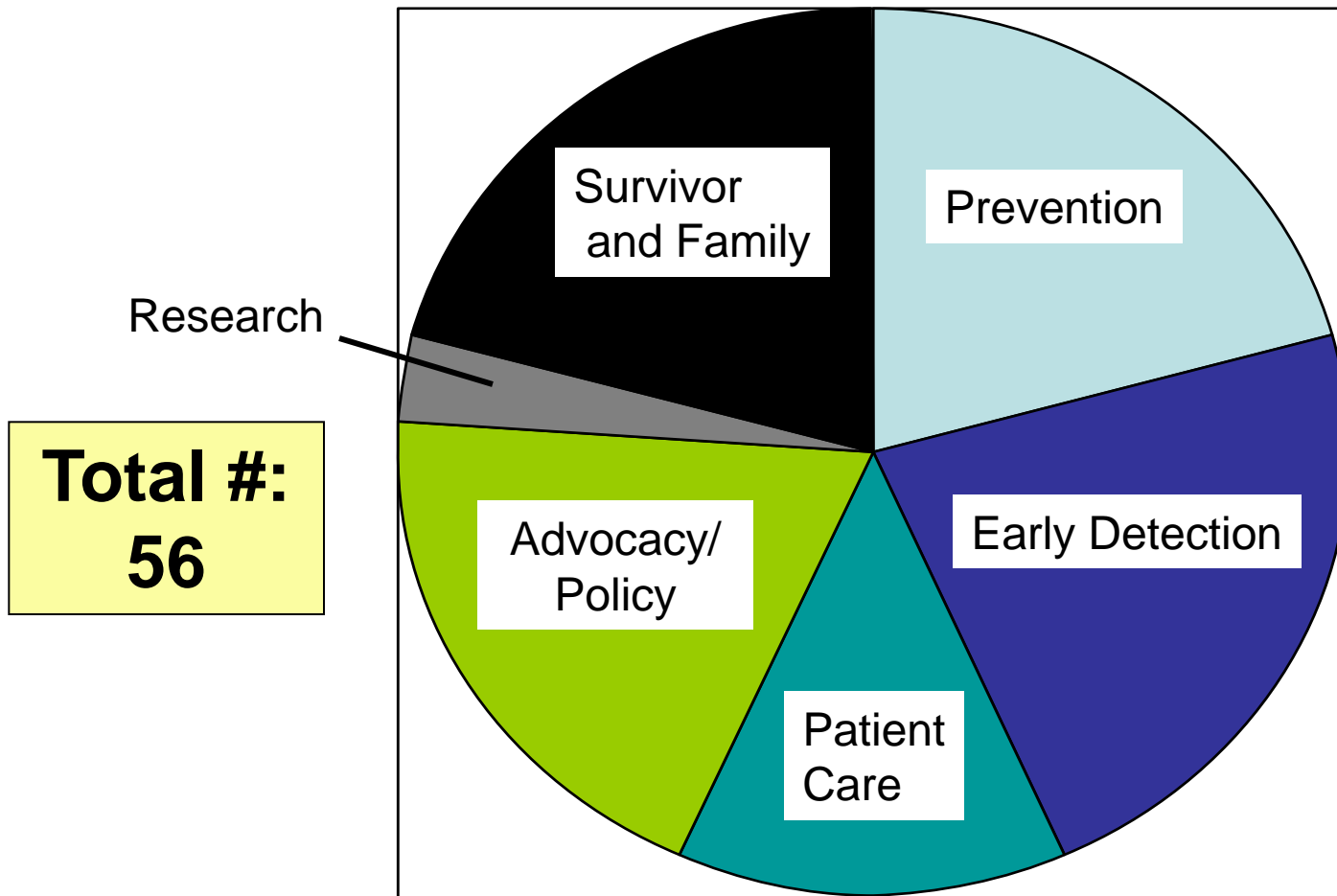
Summarize Allocation of Funding, 2005-2010

Implementation \$ by chapter



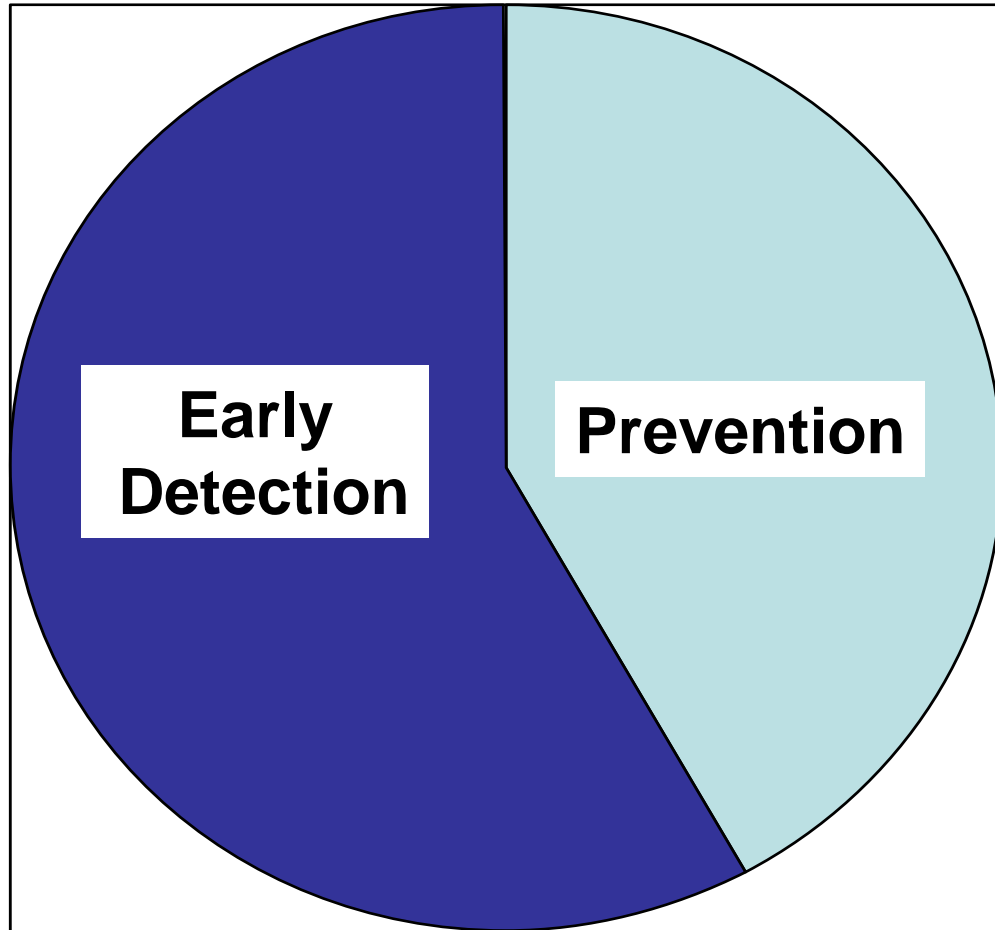
Summarize Allocation of Funding, 2005-2010

Implementation projects by chapter



Summarize Allocation of Funding, 2005-2010

Mini-grant activities by chapter



Total:
\$1,160,323

41 grants with
98 activities

Summary

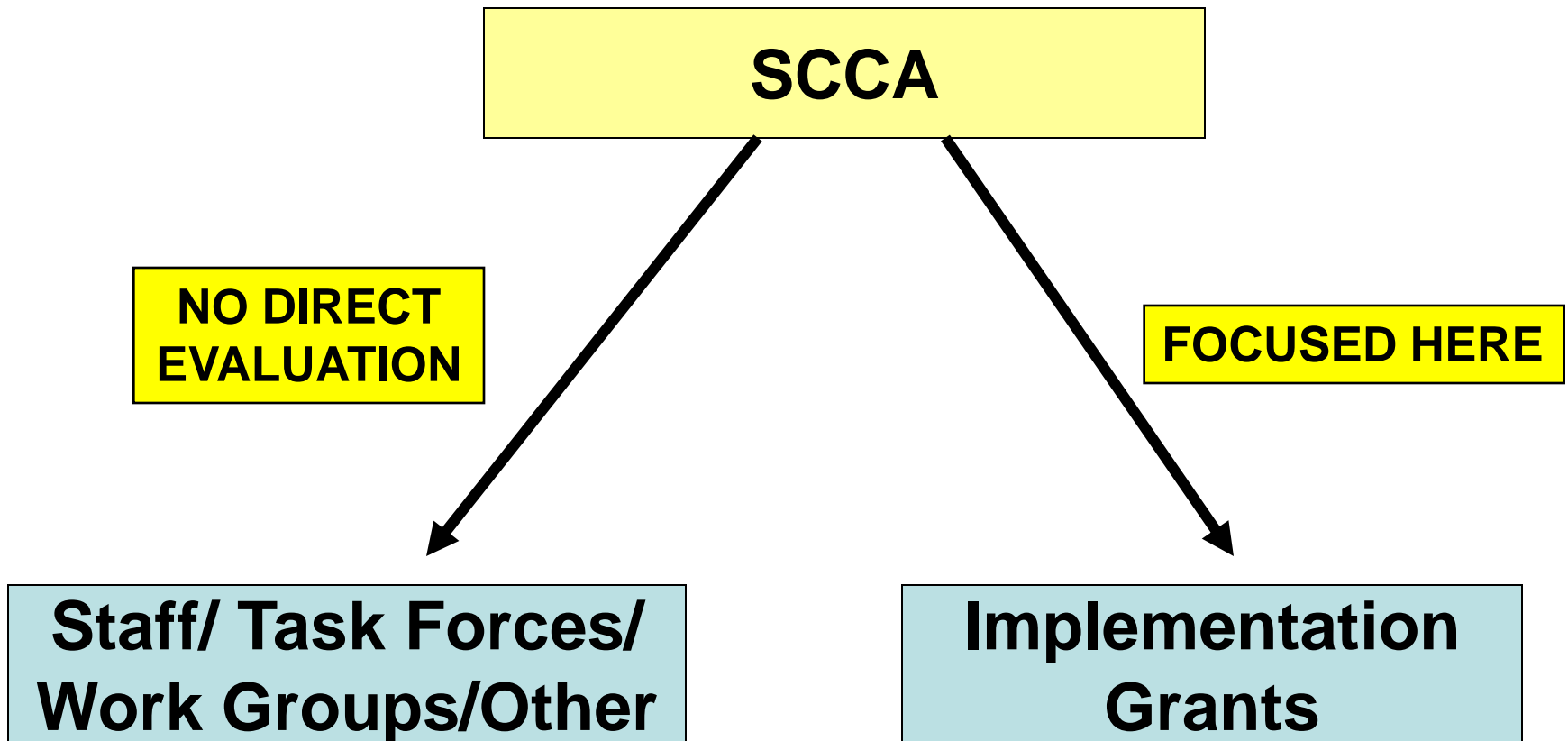
- Novel, model framework for evaluating a state cancer plan
- Major step forward: objective data-driven plan to monitor progress and enhance planning
- Highlights prior information deficit
- Substantial time collecting key information rather than data synthesis and interpretation
- Valuable first step that will require continued emphasis and resource investment

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begins with a single step.”***

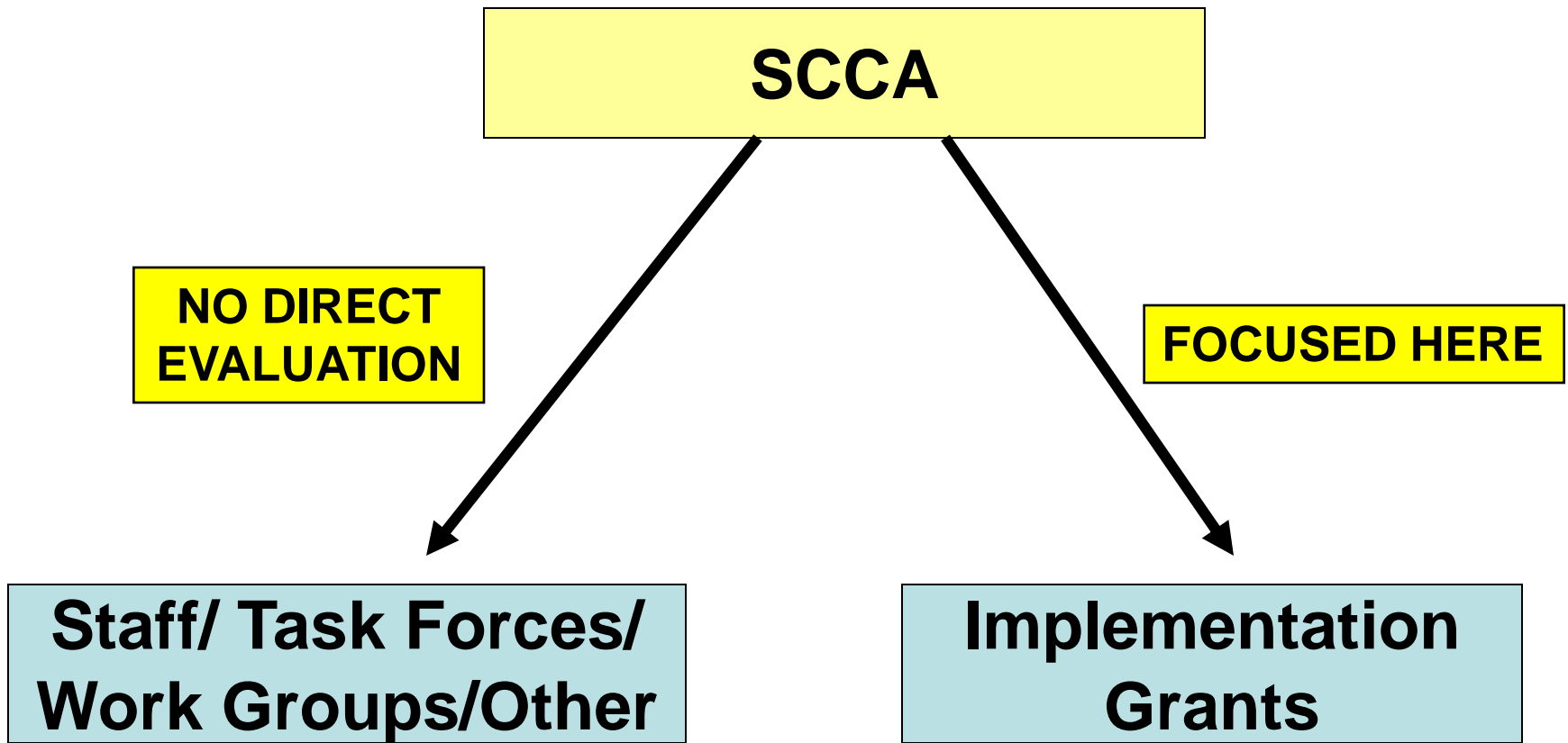
**This evaluation represents a
useful beginning, but it is
only a start to an
ongoing journey....**



SC Comprehensive Cancer Control: Scope of activities



SC Comprehensive Cancer Control: Scope of activities



→ *This evaluation is limited in focus*

Limitations

- Although ambitious in scope, evaluation was not comprehensive
- Caution warranted in interpreting data
 - For example, 30% of indicators with “A1” ratings were met, but compared to all indicators this is likely to be a biased sample of high priority indicators and thus may have a much higher proportion accomplished compared to all the indicators in the cancer plan.

Recommendations

- Rating objectives and strategies:
 - Re-visit indicators with poor ratings
 - Prospective implementation of rating process for new/revised objectives and strategies
- Detailed tracking of status of objectives and strategies
 - Ensure strategies are aligned with objectives
- Evaluate whether to pro-actively address data gaps
- Decide if evidence-based objectives/strategies are a priority

Recommendations

- Ensure alignment of funding allocation with institutional goals
 - Explore synergies to be gained with DHEC regions around mini-grants
- Invest in outcome evaluation of funded projects
- Address inactive Cancer Plan chapters
 - **Disparities**
- Restate cancer incidence/mortality goals
- Institute routine data collection and monitoring

Future Directions

- Evaluation will continue this coming year, with potential focus areas such as:
 - Steps toward instituting routine outcome evaluations of funded projects
 - Work toward uniformly measurable indicators, including assessing potential uses of primary/secondary data collection.
 - Expand to areas not yet evaluated, including staff, work groups, etc.

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