

NIH Stories of Success in Disease Prevention

Informing National Recommendations About Clinical Preventive Services

The NIH closes scientific evidence gaps and reduces uncertainty for health care providers

The USPSTF makes recommendations about primary care preventive services such as screenings, behavioral counseling, and preventive medications.

The U.S. Preventive Services Task Force (USPSTF) evaluates evidence

USPSTF issues an I statement when appropriate

The USPSTF issues an I statement when evidence is insufficient to evaluate a preventive service's benefits and harms

More evidence is generated

The USPSTF reevaluates the evidence

The USPSTF issues a recommendation for or against providing a service

FUNDING

The NIH is the largest single funder of the scientific evidence base used by the USPSTF¹

Eleven I statements were upgraded between 2010 and 2019

29%

The NIH supported an average of 11 publications per I statement. This represents 29% of all publications and 62% of U.S.-based publications that provided evidence to upgrade the I statements.

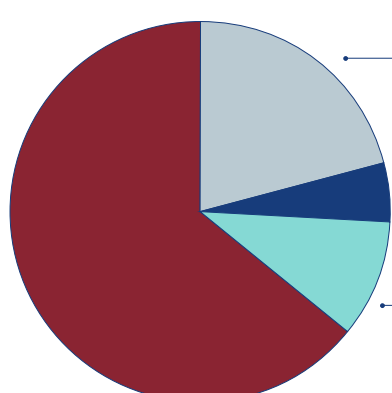
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NIH Institutes, Centers, and Offices funded research that helped upgrade the eleven I statements.

STUDY DESIGN

Study designs used in NIH-supported studies that informed upgraded I statements:

64%
Randomized controlled trials



21%
Cohort

5%
Cross-sectional

10%
Other

EVIDENCE

Characteristics of NIH-supported evidence that enabled the USPSTF to move I statements to recommended (grade A, B, or C) or not recommended (grade D) services²

I Statement Topic Area	Service Type	New Grade (Year)	Supporting NIH Institutes, Centers, Offices	Key Evidence Gaps in I Statement
Abnormal Blood Glucose and Type 2 Diabetes	Screening	B (2015)	7	<ul style="list-style-type: none"> Benefits and harms of screening for early diabetes Benefits and harms of treating screen-detected or early diabetes Benefits of treatment on delay or prevention of progression to diabetes
Aspirin Use to Prevent Preeclampsia	Preventive medication	B (2014)	1	<ul style="list-style-type: none"> Benefits of aspirin in improving fetal or maternal outcomes Harms of aspirin during pregnancy
Gestational Diabetes	Screening	B (2014)	4	<ul style="list-style-type: none"> (After 24 weeks gestation) Performance characteristics of screening methods Benefits and harms of screening Benefits and harms of treatment
Hepatitis C	Screening	B (2013)	7	<ul style="list-style-type: none"> Benefits and harms of screening Effectiveness and performance characteristics of screening methods Effectiveness and harms of treatment
Intimate Partner Violence	Screening	B (2013)	6	<ul style="list-style-type: none"> Effectiveness of screening in healthcare settings Effectiveness of interventions Adverse effects of screening and interventions
Lung Cancer	Screening	B (2013)	1	<ul style="list-style-type: none"> Benefits and harms of screening with low-dose computed tomography
Obesity in Children and Adolescents	Screening, Counseling	B (2010)	5	<ul style="list-style-type: none"> Benefits and harms of screening Benefits and harms of weight management interventions in primary care
Prostate Cancer	Screening	D (2012)	5	<ul style="list-style-type: none"> Benefits and harms of prostate-specific antigen-based screening Benefits and harms of treatment
Skin Cancer Prevention	Counseling	B (2012) C (2018)	1	<ul style="list-style-type: none"> Effectiveness of behavioral counseling interventions in children, young adults, and adults Effectiveness and harms of behavioral counseling interventions in adults over age 24 years
Tobacco Use in Children and Adolescents	Counseling	B (2013)	7	<ul style="list-style-type: none"> Benefits and harms of prevention and cessation interventions in primary care

¹Villani J, Ngo-Metzger Q, Vincent IS, Klabunde CN. Sources of funding for research in evidence reviews that inform recommendations of the U.S. Preventive Services Task Force. JAMA. 2018 May 22;319(20):2132-2133. doi: 10.1001/jama.2018.5404. PMID: 29800165; PMCID: PMC6584316.

²Klabunde CN, Ellis EM, Villani J, Neilson E, Schwartz K, Vogt EA, Ngo-Metzger Q. Characteristics of Scientific Evidence Informing Changed U.S. Preventive Services Task Force Insufficient Evidence Statements. American Journal of Preventive Medicine. 2021 Oct 14;S0749-3797(21)00457-8. doi: 10.1016/j.amepre.2021.07.014. Epub ahead of print. PMID: 34657771.