**Appendix Table 1. Detailed Description of Included Studies and Results**

| **Lead author and year of publication**  | **Sample population and setting** | **Sample size** | **Survey** | **Description of response rate strategies compared** | **Summary of results**  |
| --- | --- | --- | --- | --- | --- |
| **Response rates by strategy** | **Response rates by strategy by subgroup** |
| Anastario 2010 35 | Patients of 15 primary care clinicians at 3 practice sites in New York | Total: 5,648In person: 2,903Mail: 2,745 | Clinician & Group CAHPS (CG CAHPS) Survey supplemented with items from the Ambulatory Care Experiences Survey (ACES) | Modes tested:* In person surveys were distributed to patients with an option to complete on-site or mail back in a postage-paid envelope.
* Mail surveys were distributed to patients with a cover letter and a postage-paid envelope. Follow-up postcard and new survey two weeks after initial mailing.
 | **Statistically significant differences by mode**In person: 40%Mail: 58% | **No statistically significant differences by subgroup**  |
| Beebe 2005 46 | Adult and pediatric Medicaid enrollees in Minnesota, with oversample of enrollees who were American Indian, African American, Latino, Hmong, and Somali | Total: 8,332Incentive: 4,183No incentive: 4,149  | Survey of experiences with public health care programs | Incentive tested: * $2 bill in the first survey mailing
* No $2 bill in the first survey mailing

Both incentive and no incentive group received prenotification letter, mailed survey, mail survey follow-up 3 weeks after initial mailing, telephone survey follow-up 5 weeks after initial mailing. | **Statistically significant differences by incentive**Incentive: 43%, 54%, and 69% after the 1st mailing, 2nd mailing, and telephone follow-upNo incentive: 33%, 45%, 64% after the 1st mailing, 2nd mailing, and telephone follow-up  | **Statistically significant differences by race/ethnicity**Enrollees who were Black and Hmong were more likely to respond to the survey if provided the $2 incentive. There were no statistically significant differences in response for enrollees who were American Indian, Hispanic, or Somali. |
| Beebe 2007 54 | Patients at Mayo Clinic | Total: 2,000Each study arm: 500 | Survey to assess awareness, knowledge and opinions regarding privacy practices | Survey design features tested: * Small (6 1/8 by 8 ¼ inch) questionnaire booklet on white paper
* Small (6 1/8 by 8 ¼ inch) questionnaire booklet on blue paper
* Large (8 ¼ by 11 inch) questionnaire booklet on white paper
* Large (8 ¼ by 11 inch) questionnaire booklet on blue paper

All four study arms were conducted with initial mailing, follow-up letter after one week, follow-up survey mailing after two weeks. | **Statistically significant differences by survey design features**Small white: 68.4% Small blue: 62.3% Large white: 62.7% Large blue: 68.6%  | **No statistically significant differences by age, sex or race**  |
| Bergeson 2013 39 | Patients age 18+ with on-file email addresses who had visited one of six primary care clinics in Minnesota | Total: 9,313Web: 6,105Mail: 3,208 | CAHPS Clinician and Group hybrid survey (visit-based) | Modes tested:* Web mode included an email with a link to the website, and an entry code. Follow-up emails were sent three and eight days after the initial email.
* Mail mode initial mailing and follow-up survey mailing after two weeks.
 | **Statistically significant differences by mode**Web: 14%Mail: 33% | **Statistically significant differences by sex and age** Females and those under age 65 were more likely to respond via the web than males and those 65 or older, respectively. |
| Brown 1999 31 | Adults and children receiving both Medicaid and Aid to Families with Dependent Children, including enrollees in both HMOs and primary case management, in Los Angeles County and Oklahoma | Total: 930Telephone: 317 Mail with telephone follow-up: 313Telephone with enhanced locating procedures: 300  | CAHPS Medicaid consumer survey | Modes tested: * Telephone mode, including up to 26 calls
* Mail with telephone follow-up, beginning with three survey mailings, telephone follow-up.
* Enhanced telephone mode included search for updated address through national change of address database, search for telephone number through CD-ROM directory, and two telephone number look-up vendors prior to sampling and administering telephone mode.
 | **Statistically significant differences by mode, but not for enhanced tracking**Telephone: 43%Mixed mode: 56% mixedEnhanced tracking phone: 39% | Not reported |
| Brown 2016 49 | Adult patients from two southern California medical centers | Total: 3,592Incentive: 1,795 No incentive: 1,797 | Patient experience survey | Incentive tested: * Email with survey URL and access code offering $5 incentive for completion (cash or Target e-certificate), email reminder 12 days after, email reminder 30 days after, follow-up survey mailing after 57 days
* Same, but without incentive
 | **Statistically significant difference by incentive**Incentive: 57% No incentive: 50%  | Not reported |
| Burroughs 2001 21 | Inpatient, emergency, outpatient test/treatment and surgery patients in the BJC Health System  | Total: 8,000 Telephone: 4,000Mail: 4,000 | Separate care experience surveys for inpatient, outpatient test/treatment, outpatient surgery, emergency care | Modes tested: * Telephone mode, with calls beginning 2 weeks after discharge, ending within 3 weeks after discharge
* Mail mode, with mailing approximately 2 weeks after discharge; reminder postcard at 14 days, follow-up mail survey at 28 days, ending within 6 weeks after discharge
 | **Statistically significant differences by mode**Telephone: 39% to 45% across care settings Mail: 21% to 40% across care settings  | **Statistically significant differences by age and payer**Respondent age and payer distributions differed significantly between telephone and mail respondents, with telephone obtaining a higher proportion of inpatient respondents age 35 or younger and a higher proportion of inpatient, outpatient survey, and emergency department respondents with Medicaid insurance.No significant differences in response by mode by sex were observed. |
| Burroughs 2005 36 | Patients of three physician practices within a 214-physician medical practice  | Total: 448In-person: 129 Mail: 319 | Satisfaction survey for physician office care | Modes tested: * In-person mode, in which survey was distributed by a receptionist and completed by the patient on site, in the waiting room, immediately following the office visit
* Mail mode, with mailing to patient’s home 7 to 15 days following the office visit OR 30 days following the office visit, with postcard at 14 days; follow-up mail survey at 28 days
 | **No statistically significant differences by mode**In-person: 69.8%Mail: 76.5% mail (regardless of whether initial mailing occurred 7 to 15 days or 30 days following the visit) | **Statistically significant differences by age**Respondents age 45 and younger significantly higher response rates to the in-person mode; participants age 46 and older had significantly higher response rates for mail mode. |
| Couper 2007 22 | Adult Kaiser Permanente members who were nonrespondents to an online survey | Total: 672Telephone: 290Mail: 382 | Survey to assess experiences with Web-based weight management materials | Modes tested: * Telephone mode, including up to 15 call attempts over 28 days with median response time of 8 days; no incentive
* Mail mode, including a single mailing with a US $5 bill included over 6 months with median response time of 10 days
 | **No statistically significant differences by mode**Telephone: 59% Mail: 55% | **No statistically significant differences by age, gender, race, education, or health system region** |
| Dembosky 2013  | Medicare beneficiaries | Total: 294,877Customized mail: 289,879 Generic mail: 4,998  | Medicare CAHPS | Survey content feature tested: * Customized mail survey that named the sampled beneficiary’s health plan several times throughout; follow-up by telephone
* Generic mail survey that mentions the sample’s beneficiary’s health plan once on the back of the survey; follow-up by telephone
 | **No statistically significant differences by survey feature**Customized: 59.3% (47.9% mail and 11.4% phone)Generic: 60.1% (48.5% mail and 11.7% phone) | **Statistically significant differences by education and general and mental health status**Respondents to the generic mail survey had a somewhat lower mean education level and somewhat worse general and mental health status than respondents to the customized mail survey.  |
| Drake 2014 41 | University health center patients  | Total: 6,500Mail with telephone follow-up, 4-scale: 1,600Mail with telephone follow-up, 6-scale: 1,600Telephone with mail follow-up, 4-scale: 1,400Telephone with mail follow-up, 6-scale: 1,400Mail only, 4-scale: 500 | CAHPS Clinician and Group (CG-CAHPS) survey | Mode and response scales tested:* Mail with telephone follow-up, including survey mailing, reminder post-card 14 days later, follow-up mail survey 2 weeks later, follow-up telephone call (6 attempts) 2 weeks later. Sample for this mode evenly split between a 4-category and 6-category response scale survey version
* Telephone with mail follow-up, including prenotification letter, telephone calls beginning one week after (6 attempts), three-contact mail protocol for non-respondents (as described in mail with telephone follow-up). Sample for this mode evenly split between a 4-category and 6-category response scale survey version
* Mail only mode, using three-contact mail protocol (as described in mail with telephone follow-up), using 4-category survey version compressed to 4 pages
 | **Statistically significant differences by mode, but not by response scale**Mail + telephone, 4-scale: 57.5% Mail + telephone, 6-scale: 56.4% Telephone + mail, 4-scale: 58.5% Telephone + mail, 6-scale: 55.4%Mail, 4-scale: 44.5%  | **Statistically significant differences** **by sex, age, and education by mode, but not by response scale** Compared to mail respondents, phone respondents were significantly more likely to be male, younger, and more educated. Respondents to the four-page mail survey were similar to other mail survey respondents.There were no statistically significant differences between respondents randomized to 4-category versus 6-category response scale survey versions. |
| Elliott 2009 26 | Nationally representative sample of 45 short-term acute care hospitals with at least 1,200 annual inpatient stays | Total: 27,229 Mail: 6,806Telephone: 6,808Active Interactive Voice Response (IVR): 6,807 Mail with telephone follow-up: 6,808  | CAHPS Hospital Survey | Modes tested:* Mail only mode, including initial mailing with follow-up mailing 21 days after
* Telephone only mode, including up to 5 call attempts
* Active IVR mode, following same protocol as telephone only mode with a live operator to introduce the patient, obtain the patient’s permission for IVR survey, and as an option to complete the survey at any time
* Mail with telephone follow-up 21 days after initial mailing
 | **Statistically significant differences by mode** Mail: 38% Telephone: 27%Active IVR: 21%Mail with telephone follow-up: 42%  | **Statistically significant differences by age and service line**Response rates increased more by age in the mail only mode than in the telephone and active IVR modes. Response rates tended to be higher for the maternity than medical service line in the mail only mode, but not in the telephone and IVR modes. |
| Elliott 2013 27 | Sample of 29 short-term acute care hospitals from across the United States | Total: 26,223Mail: 6,542Speech-enabled IVR (SE-IVR): 8,689Web with mail follow-up: 11,004 | CAHPS Hospital survey  | Modes tested:* Mail only, including mail survey and follow-up survey mailing 21 days after
* SE-IVR/Phone Mode, with a live operator to introduce the patient, obtain the patient’s permission for IVR survey, and as an option to complete the survey at any time
* Web/mail , including mail invitation to participate by web, with an option of requesting a mail survey, and follow-up letter 21 days after
 | **Statistically significant differences by mode** Mail: 32%SE-IVR: 33% Web-mail: 12% | **Statistically significant differences by mode** Web-mail respondents were significantly more educated and less often Black than mail only respondents. SE-IVR respondents were less often older than 75 years and more often English-preferring.Both SE-IVR and Web-mail modes underrepresented patients older than 74 years. |
| Elliott 2019 57 | Medicare beneficiaries with high predicted probabilities of Spanish language preference | Total: 10,000Standard mailing: 5,000 Bilingual mailing: 5,000  | 2009-2010 Medicare CAHPS surveys | Survey language options tested: * Standard mailing, including bilingual (English/Spanish) presurvey notification letter with a telephone number to complete the interview by phone with a bilingual option, followed by two English-language survey mailings of the survey, follow-up by phone with a bilingual option
* Bilingual mailing, including both an English and Spanish survey; all other protocols same as English-only mailing
 | **Statistically significant difference by language option**Standard: 36% Bilingual: 40% | Not reported |
| Evans 2004 51 | All patients receiving prostate cancer treatment at one medical center | Total: 1,402 totalUnconditional incentive: 701 Conditional incentive: 701 | Survey study aimed at assessing dietary supplement-use among prostate cancer survivors. | Incentives tested: * Unconditional incentive: Mail with incentive included (30-min prepaid phone card)
* Conditional incentive: Mail with cover letter that indicated that respondent would receive an incentive upon receipt of their completed survey
 | **No statistically significant difference by incentive type**Unconditional incentive: 60% Conditional incentive: 60%  | **No statistically significant differences by age, race or cancer stage by incentive type** |
| Fowler 1999 45 | Two random samples: 1. Adults with chronic conditions employed by Washington state
2. Medicaid enrollees who were on Aid to Families with Dependent Children (AFDC) in California
 | Sample 1 total: 300, randomly assigned to telephone or mail Sample 2 total: 600, randomly assigned to telephone or mail with telephone follow-up | CAHPS survey with supplemental items for chronic conditions, Medicaid  | Modes tested, sample 1:* Telephone, including prenotification letter and a minimum of 6 calls
* Mail, including mail survey, follow-up postcard, follow-up mail survey, telephone reminder

Modes tested, sample 2: * Telephone
* Mail with telephone follow-up, including mail survey, follow-up postcard, follow-up mail survey, follow-up with telephone survey
 | **Statistically significant difference between telephone and mail with telephone follow-up**Sample 1:Telephone: 78% Mail: 74%Sample 2: Telephone: 46%Mail with telephone follow-up: 56%  | **No statistically significant differences by age, education or gender by mode** Respondents were similar across modes with regard to age, education, and gender.  |
| Fowler 2019 32 | Patients from one of three hospital-affiliated primary care practices in a suburb of Boston, Massachusetts | Total: 5,600, including 1,200 for each of four study arms and 800 for the fifth arm (patients without email addresses on file)  | Standard CG-CAHPS survey, including Patient-Centered Medical Home (PCMH) supplemental item set  | Modes tested:* Web via portal: Email with generic salutation directing to the portal to complete survey, follow-up email a week after
* Web via email link: Email with personalized salutation including link to complete survey, follow-up emails one and two weeks after
* Web with mail follow-up: Prenotification by mail, email with personalized salutation including link to complete survey, reminder email a week later, follow-up mail survey
* Mail only (two separate arms: one for those with email addresses and one for those without), including mail survey, reminder postcard two weeks after, follow-up mail survey two weeks after
 | **Statistically significant differences by mode**Web via portal: 17% Web via email link: 20% Web with mail follow-up:41% (22% email alone)Mail only (among those with email addresses): 43%Mail only (among those without email addresses): 37%  | **Statistically significant differences by age, but not by education, race or gender.**Those 65+ were significantly less likely to respond when they had to go through a portal than when they could go directly to the survey from the email request; there were no significant differences by education, race, or gender. |
| Fredrickson 2005 48 | Kansas Medicaid enrollees | Total: 1,056Standard: 371User-friendly and low literacy: 355User-friendly, low literacy with conditional incentive: 330 | CAHPS | Survey content and incentive tested:* Standard mailing
* User-friendly and low literacy mailing
* User-friendly, low literacy mailing with a $10 incentive (gift card for discount department store) conditional on survey response
 | **Statistically significant differences by survey content and incentive**Standard: 35% User-friendly and low literacy: 44%User-friendly, low literacy with incentive: 64% | Not reported |
| Gibson 1999 47 | Enrollees in Medicaid and subsidized health care programs in Pierce County, Washington  | Total: 2,243 No incentive: 412 $1 incentive: 1,467$2 incentive: 364Total nonrespondents after second mailing: 880, split between two study arms testing delivery methods | Survey regarding access, use and satisfaction with services | Incentives tested: * No incentive at first mailing
* $1 incentive at first mailing
* $2 incentive at first mailing

Delivery method tested: * Certified mail at third mailing
* 2-day priority mail at third mailing
 | **Statistically significant difference between incentive and no incentive, but not by type of incentive; statistically significant differences between certified mail and priority mail**No incentive: 36.7% $1 incentive: 48.1% $2 incentive: 50.3% Certified mail: 28.1% (among non-respondents to first two mailings)Priority mail: 21.7% (among non-respondents to first two mailings) | No significance testing reported |
| Gribble 2005 37 | Family practice patients in a regional outpatient center | Total: 684In-person: 339Mail: 345 | Patient satisfaction survey, modeled after American Medical Group Association survey | Modes tested:* In-person mode, in which patients were handed a survey at the end of their visit and asked to place completed surveys in a collection box.
* Mail mode, including survey mailing no later than a week after their appointment and reminder postcard a week after
 | **Statistically significant difference by mode**In person: 72.6% Mail: 56.5% | Not reported |
| Harewood 2001 23 | Patients referred for routine outpatient EGD or colonoscopy at Mayo Clinic who had access to an e-mail account and telephone  | Total: 63Telephone: 20Email: 23Mail: 20 | Questionnaire derived from Group Health Association of America-9 survey on endoscopy satisfaction | Modes tested:* Telephone mode, including up to two call attempts within a week of the procedure
* Email mode, including one email within 3 days of the procedure
* Mail mode, including one survey mailing sent within a week of the procedure
 | **No statistically significant differences by mode**Telephone: 90% Email: 70%Mail: 85% | **No statistically significant differences by age, gender or type of procedure by mode** |
| Harewood 2003 24 | Patients referred for routine outpatient EGD or colonoscopy at Mayo Clinic who had access to an e-mail account and telephone  | Total: 265 Telephone: 54 non-web users, 51 web usersWeb: 53 web usersMail: 52 non-web users, 55 web users | Questionnaire derived from Group Health Association of America-9 survey on endoscopy satisfaction | Modes tested:* Telephone mode, including up to two call attempts within a week of the procedure
* Web mode (tested among web users only), including distribution of survey URL and password on a card before procedure
* Mail mode, including one survey mailing sent within a week of the procedure
 | **Statistically significant differences between telephone and mail compared to web**Telephone: 81% and 78% among non-web and web usersWeb: 34% Mail: 75% and 67% among non-web and web users  | Not reported |
| Hepner 2005 33 | Adult patients from 4 physician groups in California | Total: 1,641 totalTelephone: 820Mail with telephone follow-up: 821 | G-CAHPS (Medical Group CAHPS) | Modes tested:* Telephone only mode, including advance letter a week before (English/Spanish) and up to 10 call attempts
* Mail with telephone follow-up, including survey mailing, reminder postcard 2 weeks after, follow-up mailing 4 weeks after, follow-up telephone call 3 weeks after
 | **No statistically significant difference by mode**Mail with telephone follow-up: 55% (42% mail, 13% telephone)Telephone: 53%  | Not reported |
| Labovitz 2017 38 | Patients of the Foot and Ankle Center in California | Total: 132In-person: 72Email: 60 | CAHPS Clinician and Group Survey, with additional questions from the cultural competence, health literacy, and patient-centered medical home supplemental item sets | Modes tested:* In-person mode, in which participants completed survey in a nonclinical room
* Email mode, in which participants who provided their email address before checking out then received a link to the web-based survey before the end of the same day
 | **No statistically significant differences by mode**In-person: 72.2%Email: 58.3% | Not reported |
| Mathews 2019 42 | Patients from eight hospital-based emergency departments nationwide | Total: 4,017Mail with telephone follow-up: 805 Email with mail and telephone follow-up: 804 Mail invitation to web: 804Email invitation to web: 804In-person: 800 | Emergency Department CAHPS v. 3.0 | Modes tested: * Mail with telephone follow-up, including mail same day as visit, follow-up with telephone survey 21 days after
* Email with mail and telephone follow-up, including email with URL and pin code the same day as visit, survey mailing five days after, telephone follow-up 26 days after
* Mail invitation to web, including mailing with URL and pin code the same day as visit, second mailing with URL and pin code 21 days after
* Email invitation to web: email with link the same day as visit, second email five days after, and third email 10 days after
* In-person distribution of paper survey for completion at home and return by mail
 | **Statistically significant differences by mode** Mail with telephone follow-up: 25.3% Email with mail and telephone follow-up: 30.7%Mail invitation to web: 0.8% Email invitation to web: 4.3% In-person: 9.6%  | Not reported |
| Napoles-Springer 2004 55 | Black and White primary care patients age 50 or older in Northern California | Total: 600 Prenotification letter: 300 No prenotification letter: 300  | Patient satisfaction with care | Prenotification tested:* Prenotification letter two weeks prior to survey mailing, reminder postcard 1 week after the survey, follow-up with up to 2 phone calls
* No prenotification letter, with rest of protocol the same
 | **No statistically significant differences by advance letter use**Prenotification letter: 59% No prenotification letter: 41%  | **Statistically significant differences by prenotification letter by race**Patients who received the prenotification letter were more likely to respond but this effect was statistically significant for White patients only. |
| Napoles-Springer 2005 56 | Adult patients of the University of California San Francisco-Mt. Zion adult primary careclinics | Total: 4,660Black: 1,400Non-Hispanic White: 1,400Hispanic: 1,859 | Quality of communication, decision making, interpersonal style of physicians | Invitation letter/envelope tested:* Ethnically-tailored letter and envelope inviting participants to complete a telephone survey, up to 15 call attempts
* Standard letter and envelope inviting participants to complete a telephone survey, up to 15 call attempts
 | **No statistically significant differences by letter/envelope type**Tailored: 41.5%Standard: 39.8%  | **No statistically significant differences by letter/envelope type and by ethnic-language group, age and insurance type** |
| Ngo-Metzger 2004 34 | Vietnamese, Mandarin, or Cantonese Chinese patients in the Boston metro area | Total: 479 Mail with telephone reminders: 239Telephone: 240 | Survey based on CAHPS and Picker Institute Ambulatory Care Survey; survey adapted for LEP Asians | Mode tested:* Mail with telephone reminders, including introductory letter prior to mailed survey (in English/ respective language) with telephone reminder at 4 and 6 weeks after mailing, and follow-up survey mailing 4 or 6 weeks after
* Telephone mode, including introductory letter and telephone survey a week after
 | **Statistically significant differences by mode**Mail with telephone reminders: 59.0%Telephone: 75.4% | **Statistically significant differences by mode and age, but not by gender or language** |
| Parast 2018 28 | Primary caregivers of individuals who died while receiving hospice care from hospices nationwide  | Total: 17,117, split across three study arms | CAHPS Hospice Survey | Modes tested: * Mail only mode, including mail survey, follow-up mail survey at 21 days
* Telephone only, including up to 5 call attempts
* Mail with telephone follow-up, including mail survey with follow-up telephone survey up to 5 call attempts after 21 days
 | **Statistically significant differences by mode**Mail: 42.6% Telephone: 37.9% Mail with telephone follow-up: 52.6%  | Not reported |
| Parast 2019a 29 | Adult patients discharged from hospital emergency departments nationwide | Total: 16,006, split across three study arms | Emergency Department Patient Experience of Care Discharged to Community Survey | Modes tested: * Mail only mode, including mail survey, follow-up mail survey at 21 days
* Telephone only, including up to 5 call attempts
* Mail with telephone follow-up, including mail survey with follow-up telephone survey up to 5 call attempts after 21 days
 | **Statistically significant differences by mode**Mail: 13.7% Telephone: 22.3%Mail with telephone follow-up: 28.8% | **Statistically significant differences by mode and race/ethnicity, but not by sex, age, or education** Telephone respondents were more diverse than mail respondents with regard to race/ ethnicity. |
| Parast 2019b 44 | Adult patients discharged to the community from 16 hospital-based emergency departments nationwide | Total: 26,991, split across 9 study arms | Emergency Department Patient Experience of Care Discharged to Community Survey | Modes tested: * Arm 1: Mail with telephone follow-up
* Arm 2: Paper invite with QR code and URL a day after, two emails six and eight days after, two survey mailings eight and 22 days after
* Arm 3: Paper invite with QR code and URL a day after, three emails six, eight, and ten days after, mail 14 days after
* Arm 4: Four emails one, two, four, and six days after, telephone eight days after
* Arm 5: Four emails one, two, four, and six days after, mail eight days after, telephone 22 days after
* Arm 6: Four emails one, two, four, and six days after, two mailings eight and 22 days after
* Arm 7: Two text messages one and four days after, two emails two and six days after, two mails eight and 22 days after
* Arm 8: Paper invite a day after, text message six days after, two emails eight and ten days after, mailing 14 days after
* Arm 9: Paper invite with URL a day after, two emails six and eight days after, two mailings eight and 22 days after
 | **Statistically significant differences by mode**Arm 1: 25.5% Arm 2: 15.5% Arm 3: 13.4% Arm 4: 22.9% Arm 5: 27.3%Arm 6: 15.3% Arm 7: 17.6% Arm 8: 14.4% Arm 9: 15.4%  | **Statistically significant difference by mode and age**Arms with telephone have a higher percentage of younger patients responding. |
| Renfroe 2002 68 | Patients with malignant arrhythmias from 41 hospital centers in US and Canada | Total: 664  | Patient satisfaction survey | Mode of delivery and survey features tested: * Mode of delivery: overnight express mail vs regular mail
* Enclosure of certificate appreciation: included vs not included
* Timing: sent the survey early (2-3 weeks after visit) vs late (1-4 months after visit)
* Signature on cover letter: principal investigator (PI) vs coordinator
 | **Statistically significant differences for all but signature on cover letter**Overnight mail: 75%Regular mail: 68% Enclosure of certificate of appreciation: 68% No certificate: 75%Early: 79% Late: 72% Signature on cover letter from PI: 70% Signature from coordinator: 73%  | Not reported |
| Rodriguez 2006 25 | Adult patients from the panels of 62 primary care physicians in California | Total: 22,152, split across three study arms | Abbreviated version of the Ambulatory Care Experiences Survey | Modes tested: * Mail only, including letter with paper copy of survey, follow-up mailing one week after
* Web with mail follow-up, including letter with link to web-based survey and a unique login code, follow-up one week after, follow-up survey mailing two weeks after
* IVR with mail follow-up, including letter with a toll-free phone number to complete survey by IVR, follow-up mail reminder one week after, follow-up survey mailing two weeks
 | **No statistically significant differences by mode** Mail: 50.8% Web with mail follow-up: 48.6% (18.4% web, 30.2% mail)IVR with mail follow-up: 53.7% (34.7% IVR, 19.0% mailing) | **Statistically significant differences by mode and age, education, health, and race/ethnicity**Compared with respondents in the mail arm:Web respondents were younger, more educated, had fewer medical conditions, reported better health status, and were less likely to be Hispanic;IVR respondents were more likely to not have completed high school and had more outpatient visits during the prior 12 months. In addition, Asian patients and those from other racial backgrounds were less likely to respond to the IVR survey. Differences in respondent characteristics were largely eliminated after mail follow-up to the web and IVR modes.  |
| Rosoff 2005 50 | Childhood cancer survivors ages 11 to 33 after completion of treatment from Duke University Medical Center; parents if survivors were less than age 18  | Total: 497  | Survey on health-related behaviors among childhood cancer survivors and their parents | Incentives tested: * Unconditional incentive, including mail survey and cover letter with $10 bill, follow-up mailing after two months
* Conditional incentive, including mail survey, cover letter indicating that respondent would receive $10 upon receipt of their completed survey, follow-up mailing after two months
 | **Statistically significant difference across incentive types**Unconditional: 63.9% Conditional: 44.8% | **Statistically significant differences by race, gender, or cancer type were not detectable at the study’s sample size** |
| Shaul 1999 | Employees of Washington State who were health plan enrollees with at least one covered child age 17 years or younger | Total: 600, split across four study arms  | CAHPS Child SurveyCAHPS Adult Survey  | Strategy tested: * Arm 1: Mail child survey, follow-up telephone call
* Arm 2: Mail with sampling list for parent to fill out and return to survey organization; mail with child survey as second step, follow-up telephone call
* Arm 3: Mail with adult and child survey
* Arm 4: Mail with adult survey and sampling list for parent to fill out and return to survey organization, telephone interview to sample child, mail with child survey as third step
 | **Statistically significant differences by strategy**Child survey:Arm 1: 60% Arm 2: 57% Arm 3: 52%Arm 4: 40% Adult survey:Arm 3) 55% Arm 4) 52%  | Not reported |
| Schwartzenberger 2017 43 | Patients who underwent carpal tunnel release at a tertiary medical center within the prior 5 years  | Total: 969, split across three study arms  | Boston Carpal Tunnel Questionnaire plus additional items regarding satisfaction with surgery and other topics | Modes tested: * Mail only mode, including survey mailing, follow-up survey mailing after 4 weeks
* Telephone only mode, including up to two telephone calls between 6 and 9 pm Monday through Friday
* Web-based mode, including email with link to web-based survey, follow-up email with survey link after 4 weeks
 | **Statistically significant differences by mode**Mail: 42%Telephone: 64% Web: 42% | **Statistically significant differences by age, sex, insurance, employment status, and patient portal usage**. Patient portal users, those with Medicare or private insurance, and those with employment status other than disability were significantly more likely to respond by email than portal non-users, those with Medicaid, and those who were disabled. |
| Shaw 2001 52 | Health plan enrollees ages 20 to 80 who received care from a large multispecialty group  | Total: 1,800, split across two study arms | 99 question survey including assessment of medical outcomes, anxiety and depression, comorbidities, psychosomatic, gastrointestinal symptoms, digestive health status, and health care utilization  | Incentives tested: * Unconditional $5
* Unconditional $2

Both study arms were conducted with initial mailed survey with incentive included + reminder postcard after two weeks + follow-up survey mailing to nonrespondents after four weeks (no additional incentive) + telephone reminders to nonrespondents after six weeks  | **Statistically significant difference by incentive type**Unconditional $5: 74.3% Unconditional $2: 67.4%  | Not reported |
| Shea 2008 30 | Adult Medicaid health plan enrollees | Total: 4,800, split across four study arms | CAHPS 2.0H adult survey in English and Spanish | Survey design features tested: * Illustration enhanced print format by mail
* Traditional print format by mail
* IVR, with invitation by mail
* IVR with invitation by mail and option to complete printed survey
 | **No statistically significant difference by survey design features**Illustrated mail: 30.4%Print mail: 31.3% IVR: 18.1%IVR with print: 32.7% | Not reported |
| Subar 2001 53 | Patients participating in a prostate, lung, colorectal, and ovarian cancer screening trial at one of three centers | Total: 900, split across two study arms  | Food frequency questionnaires | Survey design features tested: * 16-page questionnaire with fewer items overall and many items per page
* 36-page questionnaire designed to be cognitively easier through changes to content, order, wording, and layout

Both survey arms were administered by mail + up to five telephone calls to non-responders after three weeks | **No statistically significant difference by survey design features**16-page, more complex questionnaire: 81.6%36-page, less complex questionnaire: 81.9% | Not reported |
| Toomey 2019 40 | Parents of patients discharged from 4 units of a children’s hospital | Overall: 1,184Tablet: 596Mail: 588 | Child HCAHPS | Modes tested:* In-person mode, in which tablet survey was administered on the day of discharge; questions could be read or heard through earphones. Parents were contacted by email two days after discharge for administration of survey items regarding discharge. Follow-up was conducted by mail, then by telephone.
* Mail was sent one week after discharge
 | **Statistically significant difference by mode**In-person: 71.1% Mail: 16.3% | **Statistically significant differences across a range of respondent characteristics**Tablet respondents were significantly more likely to be fathers, more likely to have a high school education or less, less likely to be white, and more likely to be publicly insured than mail respondents. Tablet respondents were more similar to the eligible sampled population with regard to child age, insurance status and hospital service.  |