



Pulse Check Appendix 2

Detailed Procedures

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Appendix 2: Detailed Procedures

Detailed Procedures for the 2021 Pulse Check on Stewardship for Thriving Together Across America

The 2021 Pulse Check was developed and conducted in partnership between ReThink Health and the RAND Corporation.

Sampling

Goal

Collect a set of survey responses on stewardship from individuals working in government agencies, hospitals, businesses, and community non-profit organizations across the country. Survey contributors will come from a nationally representative sample of small-to-medium sized cities, supplemented by a set of surveys from selected neighborhoods in all of the largest cities in the U.S.

Sampling frame of places

We generated a sampling frame that lists all places with populations between 10,000 and 500,000 (i.e., population-based definitions of small-to-medium sized cities). The sampling frame includes characteristics of the city, such as population size, region, urban/rural location, employment status, race/ethnicity mix, income, etc. Stratified sampling was conducted on population size and region. Cities were randomly sampled within each stratum—the application of sampling strata ensures an appropriate sample size for sub-analyses conducted by each stratum. The probability of selection from each stratum was based on the overall population represented by that stratum so that our final list of invited organizations would be from cities representative of the population of the United States. In addition, all large cities (>500,000 population) were included, along with 10 randomly selected neighborhoods in the largest cities (>1,000,000 population). Our final sample included 1,244 locations.

Kinds of places included in the sampling frame

The U.S. Census provides a list of places, defined as a concentration of population that has a name, is locally recognized, and is not part of any other place. Two thirds of all places, or over 19,000, are incorporated places, which are legal entities such as cities, towns, villages, and boroughs. One third, or just under 10,000 of places, are census designated places (CDP). The census uses CDPs as a statistical counterpart to incorporated places; that is, they are unincorporated, locally recognized communities, but not part of any other place. Incorporated places and CDPs are mutually exclusive, non-overlapping places. Together, they capture roughly three quarters of the US population. The sampling frame included incorporated and census designated places that met the population size criteria for small-to-medium sized places. This restricted our sampling frame to approximately 6,500 places. 1,200 places were randomly sampled from this frame. In addition, we supplemented our sample with 44 neighborhoods from large-sized cities (population greater than 500,000). These neighborhoods were added to the final sample of places. These neighborhoods were a non-representative convenience sample included to include the largest cities, where it was not possible to use the same sampling strategy.

Sampling one type of institution per place

One institution type (e.g., governmental public health, hospital, housing, etc.) was randomly assigned to each place. For example, assuming a list of 10 organization types, we would have approximately 125 places per institution type. In the first wave of data collection 10 organization types were included hospitals, governmental public health departments, school districts, local transportation departments, business associations (such as the local chamber of commerce), and five types of community non-

profit organizations (focusing on the environment, faith and social justice, food, housing, and multisector partnerships). For each institution type, a local organization was selected and an individual with a leadership role in that organization was selected (along with a backup) to respond to the survey. Each location was also assigned a second and third option for organization type in case a suitable organization could not be identified. We used internet searches conducted by the RAND team to identify organizations that fit the criteria outlined in Table 1 and select the respondent who would be most able to answer our survey.

Table 1: 2021 Pulse Check Institution Types and Characteristics of Responding Individuals

Institution Type	Sector	Preferred Characteristics or Focus (numbers reflect preferences/ contingencies: bullets are options to consider)	Possible Job Titles (if you find everyone with these titles, collect all names and contact info)
Hospital	Health Care	<ol style="list-style-type: none"> 1. Non-profit in the city (Select the largest, defined by number of beds, non-profit hospital in the place) 2. If no non-profits, then for-profit in the city (again, select largest) 3. If none in the city, then closest of any kind 	<ul style="list-style-type: none"> • Chief Executive Officer • VP for Strategy • VP for Partnerships, ACOs • VP for Integration • VP for Equity • VP for Government Affairs, Policy, and Community • VP for Transformation • VP for Innovation
Local Public Health Department	Government	<ol style="list-style-type: none"> 1. City health department 2. County health department (encompassing the city) 3. State health department 	<ul style="list-style-type: none"> • Director, chief, assistant director • Another leader from the director’s office • Public health officer
Housing	Community Non-profit	<ol style="list-style-type: none"> 1. Org that provides direct housing services, e.g., Enterprise Community Partners is example of national org that has local branches that meets criteria 2. If a city is small and does not have “Enterprise” presence, select an independent housing services provider 	<ul style="list-style-type: none"> • Director, assistant director • Program director • Program officer or project officer words • Key words include: <ul style="list-style-type: none"> - Client services - Housing program - Resident services
Education	Government	K-12 school district	<ul style="list-style-type: none"> • Assistant or deputy superintendent focused on education (rather than administration or finance, etc.) • Superintendent

Food	Community Non-profit	<ul style="list-style-type: none"> • Org that works on access to nutritious food, e.g., org that has farm-to-school program • Org that enhances local food system (production, distribution, affordability) • Org that alleviates food insecurity, e.g., food pantry <p>May include food assistance (SNAP or food banks), but not limited only to those urgent services</p>	<ul style="list-style-type: none"> • Director, assistant director • Program director • Program officer or project officer
Transportation	Government	<ol style="list-style-type: none"> 1. City department of transportation 2. County department of transportation 3. City or County Department of Public Works or Roads 4. State department of transportation 5. Local organization providing public transportation (bus, metro) 	<ul style="list-style-type: none"> • Director, chief, assistant director • Another leader from the director's office
Business, Economy	Business Association	<ol style="list-style-type: none"> 1. Chamber of commerce 2. Business council/association (small, medium, and/or large) 3. Association representing groups or sector (e.g., farming) 4. City/regional economic development (wages, jobs, economic vitality) 	<ul style="list-style-type: none"> • President/CEO • Vice President • Director • Key words: <ul style="list-style-type: none"> - Strategy - Partnerships/ Membership - Development - Marketing
Environment	Community Non-profit	<ul style="list-style-type: none"> • Org that works on one or more of the following areas: <ul style="list-style-type: none"> - clean air, water, soil - sustainable energy, resources - contact with nature - climate resilience 	<ul style="list-style-type: none"> • Director, assistant director • Program director • Program officer or project officer
Multisector Partnership	Community Non-profit	<ol style="list-style-type: none"> 1. Formal entity dedicated to working across sectors to expand vital conditions for well-being (i.e., they should have a wide view of health and well-being, not just a single-issue area like opioids, poverty, or obesity) 2. If none, then a more narrowly focused group could be considered, but it should still span 3+ sectors <ul style="list-style-type: none"> • Key words: <ul style="list-style-type: none"> - Coalition, cooperative, partnership, convener, alliance, backbone org - Healthy eating, active living, health planning, health & economic development 	<ul style="list-style-type: none"> • Director, assistant director • Chair, vice chair • Coordinator

<p>Faith and Social Justice</p>	<p>Community Non-profit</p>	<p>1. Org focused on racial justice, social inclusion, anti-discrimination</p> <ul style="list-style-type: none"> • Possible org types: <ul style="list-style-type: none"> - Civil rights, human rights - Faith org organization - Resident voice in government - Information access (digital divide) • Key words: <ul style="list-style-type: none"> - Equity, diversity, inclusion, belonging, civic engagement, democracy 	<ul style="list-style-type: none"> • Director, assistant director • Program director • Program officer or project officer
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In wave 2 of data collection, we randomly assigned an organization type to each location that had not previously responded to our survey. Due in part to the COVID-19 pandemic, participation in our survey was lower than anticipated, particularly among respondents in transportation and education. For the second wave of data collection, we excluded these organization types from our assignment of organizations. We also excluded public health departments and hospitals, as we were planning a third wave of data collection that would focus exclusively on these organizations. Thus, in the second wave, organizations were assigned from business associations and the five types of community non-profit organizations.

In the third wave of data collection, for all locations that had not previously responded we identified the local public health department and a local hospital to invite to our survey. Participation of a sufficient number of hospitals and public health departments was essential to achieve the research goals. As a result, we invited many more organizations to increase the likelihood of having at least 40 respondents from each organization type. We identified points of contact at public health departments within each sampled location via the National Association of County and City Health Officials (NACCHO) Directory of Local Health Departments. We identified points of contact at hospitals within each sampled location via data from the American Hospital Association.

While there was the possibility of multiple respondents for a single location, in practice we had 11 locations with multiple respondents and chose to keep all respondents in our sample.

Survey Implementation and Response Rates

Respondents received 4 to 5 email invitations and if a phone number could be identified they also received a phone call inviting them to go to the website to participate in the survey. The survey was administered online via an embedded web link. Each respondent received a \$15 incentive for participating in the survey, which they could receive either as a gift card, or donate to charity.

Surveys were fielded in three waves. Table 2 summarizes the dates of each wave and the number of respondents invited and responding to each wave. The response rate in each wave was lower than anticipated, however the survey was planned prior to the COVID-19 pandemic which significantly impacted the obligations and availability of many of the potential respondents in our sample.

Table 2: Waves of 2021 Pulse Check Implementation

Wave	Field Dates	Number invited	Number Responded	Response Rate
1 (All institution types)	October - December 2020	1244	111	8.9%
2 (Business association and Non-profits only)	Feb -April 2021	1133	179	15.8%
3 (Public Health Dept only)	June 2021	638	33	5.2%
3 (Hospitals Only)	June 2021	805	49	6.1%

Some respondents were dropped from our final sample due to incomplete responses.

The differences in response rates across the different waves of data collection largely represent differences in participation by sector. Respondents from business associations and non-profit organizations were the most likely to participate (with participation rates averaging 15%). Hospitals and public health departments were less likely to participate (on average 5% to 6% participation). Transportation department and school district representatives were the least likely to participate (less than 5% participation for both sectors). Many factors were likely to influence the decision to participate. The COVID-19 pandemic affected all organizations in our survey but affected some organizations more acutely than others; those who were most impacted by COVID (hospitals, public health, and schools) may have had less time for ancillary activities. People who work for larger organizations may also have been less likely to participate if these organizations were more likely to have more stringent filters that screened out the email invitations. While our survey vendor took steps to ensure the deliverability of emails and made phone call reminders where possible, some people still may not have received the invitations.

Other non-participants may have chosen not to participate because they felt the survey was not aligned with their interest; the invitation was framed in terms of community well-being, which may have seemed off topic for potential respondents whose organizations and viewpoints are least aligned with a stewardship mindset. This in particular may have influenced the participation of respondents in the transportation and education sectors. This is an important limitation of this, and all surveys; the decision to participate or not is not random and those whose views are most closely aligned with the topic of interest may be more likely to participate.

Survey Design and Testing

We designed our survey to capture key constructs of interest to ReThink Health. The primary focus of the survey was about the respondent's perception of their own organization, their community, and other organizations in their community. Question topics included perceived opportunities for health and well-being in the community, organizational priorities, views about how their own organization does its work, views about how other organizations in the community do their work, strategies and tradeoffs within their own organization, views about purpose, power, and wealth, as well as personal characteristics of the respondent and their organization. The complete survey instrument is available in Appendix 1.

We conducted several tests of the survey before sending widespread invitations. We conducted two focus groups with a convenience sample of organizational leaders and researchers where we received feedback about the structure and topics of the survey. These respondents included groups who focus on stewardship in their own work and were previously familiar with ReThink Health. We also conducted think-aloud in-depth interviews with eight respondents from organizations that fit the profile of our sample but were not part of our sample. These respondents were drawn from a convenience sample who were familiar with RAND, but not familiar with ReThink Health.

Summary Statistics

We prepared summary statistics in STATA17. For most questions we present the percent of respondents who selected each option. In some cases, we combine categories (such as somewhat and strongly agree). When we make comparisons across respondent characteristics (e.g., types of organizations), we only present results that are conceptually meaningful and significant based at the 5% significance level using Chi-squared statistics that compare the distribution of responses across all groups. We also conducted t-tests that compare the percent of respondents for a given subgroup to the percent of respondents for all other subgroups and ANOVA tests to compare means between subgroups.

Calculated Scores for Diffusion and Alignment

We calculated two composite indices of diffusion and alignment. For both indices we started with a set of selected items and conducted exploratory factor analysis to identify items that “hung together” and have strong associations with the corresponding composite to create our composite scores. Table 3 presents five items that are used to compute the Diffusion index and four items used to compute the Alignment index, along with the numeric response options and internal consistency reliability (Cronbach's alpha) values for items that each have several sub-items. For items with several sub-items, responses to sub-items were averaged to compute the overall item response. Table 3 also presents factor loadings which are measures of association between the item and the two indices of diffusion and alignment.

We calculated an average score based on those items that had a strong association from the factor analysis. For each composite score, we rescaled the item responses to be on a scale from zero to 100 by transforming the item numeric response options to a scale of 0-100 using the formula:

Where Y is the 0-100 score, X is the score on the original scale, a is the minimum possible score on the original scale, and b is the maximum possible score on the original scale. Rescaling each item ensured that they all impacted the overall score in the same way, even if the initial scale across items was different. Then we averaged these rescaled responses across the set of items for the measure, so that the final composite score is on a 0-100 scale.

Table 3: Item Factor Loadings from Exploratory Factor Analysis for Indices of Diffusion and Alignment

Survey Items	Index of Diffusion of Stewardship Mindsets and Actions	Index of Alignment of Stewardship Mindsets and Actions
Items hypothesized to be related to diffusion of stewardship mindsets and actions		
1. All people in my community have equal opportunities to live their best possible lives (1=Strongly Disagree, 0=all other responses including somewhat disagree, neither agree or disagree, somewhat agree, or strongly agree)	0.487*	-0.316*
7. To what extent does your organization consider systems change in your community to be a goal (1=It is not something we talk about; 2=It does not play an important role; 3= It is one of our goals, but not the most important one; 4=Is our most important goal)	0.630*	-0.004
8. Thinking about your organization’s internal norms and processes, how much do you agree with the following statements (This question contains 8 sub-questions with response options 1=Strongly disagree; 2= Somewhat disagree; 3=Neither agree or disagree; 4=Somewhat agree; 5=Strongly agree; Cronbach’s alpha=.81)	0.515*	0.287*
15. To what extent does your organization lead or participate in the following activities with other organizations? (This question contains 7 sub-questions with response options 0=No participation, 1=Limited or active participation or leadership; Cronbach’s alpha=.69)	0.439*	0.320*
18. Which of the following investment strategies do you think would have the greatest impact on enabling all people in your community to thrive? Choose one. (1=invest more resources among those who have the most to gain, 0=Invest more resources among those who need just a little more help or invest resources evenly and equally among all groups)	0.424*	-0.176
Items hypothesized to be related to alignment of stewardship mindsets and actions		
13. Based on your experience, please rate the effectiveness of working relationships across organizations in your community on a scale from 0-10 (0=Not at all effective, 10=Highly effective)	-0.038	0.599*
14. To what extent do you think your organization and others working in the areas listed below are aligned? By ‘aligned’ we mean the working in complementary ways towards similar aims. (This question contains 11 sub-questions with response options 1=Not aligned; 2=Somewhat aligned; 3=Well aligned; Cronbach’s alpha=.73)	0.122	0.589*

<p>16. For this question, please think about other organizations in your community that work on aspects of well-being (such as education, food access, faith, social justice, environmental protection, business organizations, housing, healthcare, public health, and transportation). Based on your experiences, among those organizations, how many do you think participate in the following activities with other organizations ((This question contains 7 sub-questions with response options 1=None, 2=Some, 3=About half; 4=Most, 5=Almost all of All; Cronbach's alpha=.90)</p>	<p>-0.006</p>	<p>0.637*</p>
<p>15. To what extent does your organization lead or participate in the following activities with other organizations? (This question contains 7 sub-questions with response options 0=No participation, 1=Limited participation, 2=active participation or leadership; Cronbach's alpha=.84)</p>	<p>0.511*</p>	<p>0.568*</p>

Note. * Item factor loadings are statistically significant at p < .05.