

The Harris County Public Engagement Project on Pandemic Influenza

Harris County Public Health and Environmental
Services

Summary Report

July 29, 2011



Executive Summary

Introduction

During June and July 2011, Harris County Public Health and Environmental Services (HCPHES), with assistance from the Keystone Center and the Epidemiology Monitor, consulted with members of the general public and with representatives of multiple organizations (i.e., the stakeholder public) serving the health and social service needs of the County. The purpose of these consultations was to obtain the considered judgments of both publics on difficult decisions which must be made when the county is faced with both a pandemic influenza and an accompanying shortage of critical medical supplies. The consultation will serve to help HCPHES and its partners complete a response plan for a future pandemic of influenza or other infectious respiratory diseases.

Methods

HCPHES contracted with the Keystone Center, a neutral facilitation organization and the Epidemiology Monitor, a public engagement consultancy, to conduct 8 day-long general public meetings in different geographic areas of Harris County and 1 day-long stakeholder public meeting at a central location. Participants for the general public meetings were recruited through a variety of channels, including email lists of supporting organizations, display advertising, and videos. Participants for the stakeholder meeting were identified from the files of organizations kept by HCPHES. At all meetings, attendees heard a video presentation containing basic information about influenza needed to have an informed discussion about difficult decisions related to the allocation of what are anticipated to be scarce supplies of flu vaccine, anti-viral drugs, and ventilators.

Results

A total of 796 members of the general public registered and 606 participated in the meetings, including 137 persons who registered on the day of the meetings. A total of 30 representatives from multiple service organizations attended the stakeholder meeting.

A. Vaccines

Participants were asked to rate the importance on a scale of 1-7 (with one being not at all important and 7 being extremely important) of using limited supplies of vaccine to protect specific subgroups of persons in the population. Results were analyzed by the percentage of members of the public who judged each question or statement as extremely or very important. The first and highest level of importance was for health care workers (89% rated very or extremely important), secondly by persons at high risk because of medical condition and age (70% and 70%), thirdly public safety workers (57%), fourthly by critical service workers (38%), and finally by government leaders and persons vaccinated because of age alone (25% and 20%). Stakeholder judgments were similar.

B. Anti-viral drugs

The first and highest level of importance was for ill health care workers (83% rated very or extremely important), secondly for persons at high risk because of their medical condition, persons at high risk because of their age group, and for public safety workers (73%, 69%, and 68%), thirdly for ill persons who are likely to recover from their influenza illness, well persons who want to take the drugs, and persons whose age only qualifies them for treatment (22%, 18%, 19%). Stakeholder judgments fell into roughly four different levels of importance and were similar.

C. Ventilators

Participants were asked to rate a set of five potential policy statements governing the use of limited supplies of ventilators during a pandemic. A high percentage of members of the general public (87%) and of stakeholders (92%) rated having an advance plan for doctors to use in allocating ventilators as very or extremely important. They both voted the use of the same criteria in deciding who gets ventilators (81% general public and 89% stakeholders). In determining what type of criteria to use in deciding about the use of scarce ventilators, both groups of participants identified the likelihood of recovery as the most important criterion (68% general public and 62% stakeholders). Both groups of participants rated occupation and age criteria at the lowest level of importance with the general public and stakeholders rating occupation at 17% and 12% respectively, and age at 20% for the general public and 11% for stakeholders.

Conclusion

When confronted with clearly defined difficult choices following day long deliberations about the allocation of scarce influenza vaccine, anti-viral drugs, and ventilators, a large, geographically representative sample of the general public of Harris County expressed clear, consistent preferences for the use of these resources. Interestingly, a sample of representatives from stakeholder organizations serving the County also expressed clear judgments nearly identical to those of the general public. These results appear robust and could be used by HCPHES and the Committee on Pandemic Influenza Medical Standards of Care to help finalize difficult decisions to be made in the next update of the county-wide plan.

Introduction

During June and July 2011, Harris County Public Health and Environmental Services (HCPHES), with assistance from the Keystone Center and the Epidemiology Monitor, consulted with members of the general public and with representatives of multiple organizations (i.e., the stakeholder public) serving the health and social service needs of the County. The purpose of these consultations was to obtain the considered judgments of both publics on difficult decisions which must be made when the county is faced with a pandemic influenza and an accompanying shortage of critical medical supplies. The consultation will serve to help HCPHES and its partners complete a response plan for a future pandemic of influenza or other infectious respiratory diseases. This plan was drafted beginning in 2006 by the Harris County Committee on Pandemic Influenza Medical Standards of Care, subsequently updated in 2008 and 2009, and will undergo a substantive review in late 2011 to incorporate both the lessons learned from the H1N1 pandemic in 2009-10 and the findings from the recent public consultations.

Methods

HCPHES contracted with the Keystone Center, a neutral facilitation organization and the Epidemiology Monitor, a public engagement consultancy, to conduct eight day-long general public meetings in different geographic areas of Harris County and one day-long stakeholder public meeting at a central location. A hypothetical scenario involving a severe 1918-like influenza pandemic was distributed and read aloud to all the participants. Participants for the general public meetings were recruited through a variety of channels, including email lists of supporting organizations, display advertizing, and videos. The recruitment videos were distributed in English, Spanish, Vietnamese and Chinese. Recruiters also placed a recruitment ad on Facebook. Each registrant was offered a \$75 stipend for attending the meeting for a full day. Participants for the stakeholder meeting were identified from the files of organizations kept by HCPHES.

At all meetings, attendees heard a video presentation containing basic information about influenza in order that they might have an informed discussion about difficult decisions related to the allocation of scarce supplies of flu vaccine, antiviral drugs, and ventilators. Small group discussions were held at individual tables each with a facilitator and reports of the opinions of each table were shared with all participants in large group sessions. To stimulate values-oriented discussion of the difficult choices facing the participants on vaccines and antiviral drugs, each participant was given a deck of cards with statements expressing desirable choices and asked to sort the statements in descending order of importance. For the ventilator discussion, participants were offered descriptions of five patients and had to choose two to receive ventilators. Individual and group selections of the two patients were part of whole-group deliberation. Following these exercises and discussions, participants were polled electronically to obtain each individual's ratings of key questions related to the three topics. Participants were given the opportunity to discuss the poll findings throughout the meeting.

Results

A total of 796 members of the general public registered and 606 participated in the meetings, including 137 persons who registered on the day of the meetings. Examined by age, 24% of participants who specified their age were 18-30 years, 39% were 31-50 years, and 37% were 51 and over. Examined by gender, 39% of participants with age noted were male and 61% female. The race/ethnic diversity when specified was 64% black, 10% Latino, 5% Asian, and 11% white. A total of 30 representatives from multiple service organizations attended the stakeholder meeting.

A. Vaccines

Participants were asked to rate the importance on a scale of 1-7 (with one being not at all important and 7 being extremely important) of using limited supplies of vaccine to protect specific subgroups of persons in the population. Results were analyzed by the percentage of members of the public who judged each question or statement as extremely or very important. The results for the other outcomes ranging from not at all important to moderately important are also presented in the tables. A full presentation of polling results can be found in Appendix A.

General Conclusions

Using this analysis, the results fell into roughly five different levels of importance or tiers for both members of the general public and for stakeholders. The first and highest level was for health care workers (89% rated very or extremely important), the second for persons at high risk because of medical condition and age (70% and 70%), the third for public safety workers (57%), the fourth for critical service workers (38%), and finally by government leaders and persons vaccinated because of age alone (25% and 20%). The range in percentage points from the group achieving the highest rating of importance to the group being rated of lowest importance was 69 percentage points.

Stakeholder judgments were similar for health care workers at the highest level (100% very or extremely important) and for government leaders and persons vaccinated because of age alone at the lowest level (7% and 10%). At the second and third levels of importance, stakeholders differed from the general public and attached as much importance to vaccinating high risk persons (79%) as public safety workers (75%), but lower importance to vaccinating persons at risk because of their age (60%). The same percentage of members of the general public and stakeholders (38%) rated critical services workers as very or extremely important, each placing them in a fourth tier of importance compared to all the other groups.

Individual Questions

Again, the vaccination question that yielded the most agreement from all eight public engagement meetings, as well as the community partner meeting, was the question in regard to vaccinating health care providers.

How important would it be to vaccinate health care providers so they can continue providing medical care to their patients?

Not at all important (do not consider)	9	2%
Unimportant (but consider)	7	1%
-	2	0%
Moderately important	22	4%
-	24	4%
Very important	70	12%
Extremely important	464	78%
	598	

90% of those polled said that it was very important to extremely important to vaccinate health care providers. This same question resulted in 100% agreement (only one participant said that it was very important, all others said it was extremely important) at the community partner meeting:

Not at all important (do not consider)	0	0%
Unimportant (but consider)	0	0%
-	0	0%
Moderately important	0	0%
-	0	0%
Very important	1	3%
Extremely important	29	97%
	30	

The second most commonly agreed to question across all nine meetings focused on vaccinating those with a medical condition:

How important would it be to vaccinate people who have a medical condition that makes it more likely they will get very sick or die if they got pandemic flu?

Not at all important (do not consider)	36	6%
Unimportant (but consider)	23	4%
-	17	3%
Moderately important	57	9%
-	45	7%
Very important	135	22%
Extremely important	288	48%
	601	

70% of the participants agreed it was very important to extremely important to vaccinate those with a medical condition.

Taking all nine meetings, age was the least important consideration.

How important would it be to always use age group as one of the deciding factors on who should get vaccinated?

Not at all important (do not consider)	164	27%
Unimportant (but consider)	100	17%
-	54	9%
Moderately important	118	20%
-	50	8%
Very important	55	9%
Extremely important	62	10%
	603	

44% of the respondents felt that it was not at all important to unimportant to always consider age group in vaccination prioritization.

When discussing vaccines in their small groups and when given the opportunity to address the whole group, the participants most often stated the importance of vaccinating healthcare workers, doctors and nurses in order that healthcare workers could attend to people made sick by the pandemic. Healthcare jobs stand in stark contrast to other jobs. Many of the participants reacted against the idea that the status of one's job should lead to receiving scarce vaccine. Much of the discussion on this point centered on a negative reaction to the idea that social status, personal connection, and economic status would open the way to access and that those without economic or social status would be left out of the vaccine allocation system.

This reaction was not universal. In some locations, and for a sizable number of the participants, it is important to give priority to those who provide essential services. For example, in the Berry Center meeting, 31 of the 44 participants (70%) rated it extremely important to vaccinate public safety workers. This stands in contrast to the total rating in which 214 of the 568 who polled (38%) rated it extremely important to vaccinate public safety workers.

Looking at other job categories, those who provide water, transportation and other services were less likely to be given high priority than public safety workers and government leaders were the least likely among the specific jobs to be given a high priority. For example, when taking into account all eight public meetings and the community stakeholder meeting, 22% (132 of 605) rated it extremely important to vaccinate workers who provide water, power and other critical services; and 15% of the participants (88 of 601) rated it extremely important to vaccinate government leaders. In contrast, 288 of the 601 (48%) rated it extremely important to vaccinate those who have a condition that makes it more likely that they will get sick or die from the pandemic and 464 of 598 or 78% rated it extremely important to vaccinate healthcare workers.

In discussion groups, vulnerability to the pandemic was a major theme. Many of the participants supported providing vaccine to those who are at greatest risk of serious illness or death. Many gave priority to pregnant women who, in the scenario, were at greater risk. This discussion revealed a mix of altruism and detached practicality; while some would provide vaccine to the most vulnerable out of compassion for their being at risk, others stated that the most vulnerable should be vaccinated as a way to prevent spread of the pandemic. The meeting at the Humble Center, for example, revealed a strong preference (7 of 12 discussion groups) for vaccinating children. In some cases because children will spread the disease and make others sick and in

some cases because vaccinating children represents a commitment to the future and to the idea that children deserve the opportunity to live a full life.

Age was a significant area of focus for the discussion groups. The statements in the discussion mirror the polling result; only 10% (62 of 603) believe it to be extremely important to always use age as a factor in making vaccine allocation decisions and 43% (206 of 604) believe it to be extremely important to use age only if an age group has a higher likelihood of illness or death. Many of the participants reacted against the statement “Adults have lived a big part of their lives already. They should make way for children to be vaccinated first because children have their whole lives ahead of them”. At the same time, on many occasions, a participant would take the microphone and announce to the other participants that as a grandparent, s/he would see to it that a grandchild would receive a vaccine first and would step out of line in favor of that child.

In the discussions, the coincidence of age and vulnerability carried the most weight. For many, vaccine should be made available to those in a specific age group if those in that age group were more likely to get very sick or die from the pandemic. Otherwise, many are skeptical of age as a criterion.

B. Antiviral drugs

Participants were asked to rate the importance of using limited supplies of antiviral drugs to prevent or treat specific subgroups of well or ill persons in the population. Using an analysis structure similar to the one above for vaccines, the results fell into roughly three different levels of importance for members of the general public.

General Conclusions

The first and highest level was for ill health care workers (83% rated very or extremely important), secondly for persons at high risk because of their medical condition, persons at high risk because of their age group, and for public safety workers (73%, 69%, and 68%), thirdly for ill persons who are likely to recover from their influenza illness, well persons who want to take the drugs, and persons whose age only qualifies them for treatment (22%, 18%, 19%).

Stakeholder judgments fell into roughly four different levels of importance. They concurred with members of the public in placing health care workers in the highest level of importance (97%) but also placed public safety workers in that category (90%). For stakeholders as for members of the public, high risk persons because of their medical condition and persons at high risk because of their age group were in the second tier of importance (80% and 77%). At the third level of importance, stakeholders also placed sick persons who are likely to recover (17%), however healthy non-ill persons who want to take the drugs as a preventive measure and persons whose age only qualifies them for the drugs were at a fourth lowest level (7% and 0%).

Individual Questions

Similar to the vaccine polling questions, the antiviral question that yielded the highest agreement amongst all nine meetings was in relation to health care providers.

How important would it be to use antiviral medicines to treat health care providers who are ill with pandemic flu so they can recover and resume providing medical care to their patients?

Not at all important (do not consider)	20	3%
Unimportant (but consider)	6	1%
-	4	1%
Moderately important	24	4%
-	38	7%
Very important	75	13%
Extremely important	416	71%
	583	

84% of those polled said that it was very important to extremely important to designate health care providers as a priority in order for them to be well enough to continue to care for their patients. This too was the second highest ranking question at the community partner meeting:

Not at all important (do not consider)	0	0%
Unimportant (but consider)	0	0%
-	0	0%
Moderately important	0	0%
-	1	3%
Very important	3	10%
Extremely important	27	87%
	31	

87% of the participants said it was extremely important to provide health care professionals with antiviral medication. The antiviral question that created the “highest-low” related to the usage of antiviral medication amongst the healthy population without flu-like symptoms:

How important would it be to use antiviral medicines for people worried about catching pandemic flu even if it means the supply will run out faster and some people who get sick may have to go without treatment?

Not at all important (do not consider)	301	50%
Unimportant (but consider)	69	12%
-	31	5%
Moderately important	53	9%
-	40	7%
Very important	36	6%
Extremely important	69	12%
	599	

Over 300 people said that it was not at all important and 62% of those polled said it was not at all important to unimportant to consider providing antiviral medication to those who are healthy as a preventative measure.

At the other end of the spectrum, the antiviral question that caused the “lowest-high” response across all nine meetings was in regard to always using age as a determining factor.

How important would it be to always use age group as on the deciding factors on which pandemic flu patients should get treatment with antiviral medicines?

Not at all important (do not consider)	184	30%
Unimportant (but consider)	111	18%
-	56	9%
Moderately important	95	16%
-	52	9%
Very important	43	7%
Extremely important	63	10%
	604	

Only 17% of the respondents said age should always be considered (ranking from very important to extremely important) when deciding who should receive antiviral medication in the case of pandemic influenza.

The discussions about antiviral medications mirrored the discussions about vaccines in many ways, including which jobs should be given priority. Most participants felt that one’s profession should not always be a deciding factor in allocating antiviral medication because everyone believes their job to be important. Occupation should not determine if a group is eligible for antivirals unless they are health care providers or those workers who are critical to keeping society safe and functioning. In the Shirley Acres meeting, for example, eleven of thirteen groups placed the following statement in their top three: “Sick doctors, sick nurses and sick healthcare workers should be in the first groups to get antiviral medicine treatment. We need them to recover so they can continue to care for patients who need regular medical care or surgery as well as for all the patients sick with pandemic flu.” In all, 71% (416 of 583) found it extremely important to provide antivirals to sick healthcare workers and 46% (272 of 594) found it extremely important to provide them to public safety workers.

As with vaccines, vulnerability to the pandemic was an important factor. In the Riley-Chambers/Barrett Station meeting, seven of nine groups disagreed with the statement that “healthy people with mild pandemic flu illness should be eligible to get antiviral medicines”, citing the need to treat those who are sick first if there were a shortage. In that same meeting, the only unanimous choice of all nine of the discussion groups was to provide antiviral medication, “if someone is sick enough to be hospitalized with pandemic flu.” The severity of the disease was the first criterion for many of the participants. In line with this view, most groups also said that people who are healthy should not receive the antivirals unless all who are sick have been treated.

C. Ventilators

Participants were asked to rate a set of five potential policy statements governing the use of limited supplies of ventilators during a pandemic. Prior to being polled, participants discussed a hypothetical scenario at a community hospital at which five patients of different age groups, occupations, family situations, and antecedent medical conditions were said to require a ventilator to survive, but only two ventilators were available. To stimulate a consideration of all

the competing values in this situation, participants were asked to decide which two patients should receive the ventilators. In most of the small-group discussions, participants focused on first on likelihood of recovery and many of the participants chose to provide a ventilator to the person most likely to survive and many of the small groups reached consensus on this point. A very large number chose the youngest participant to receive a ventilator, combining likelihood of recovery and age as the factors leading to their choice. The Galena Park meeting is a case in point. Every group chose patients A and C for ventilators. Patient A is a 7 year old child with pandemic flu who has a 50/50 chance of surviving with the use of a ventilator; Patient C is a 29 year old restaurant cook who has an excellent chance of surviving with the use of a ventilator. Even when other groups in other meeting sites made different choices, age and prognosis were among the most important criteria.

General Conclusions

Having completed their deliberations, the participants were polled on the policy choices. A high percentage of members of the general public (87%) and of stakeholders (92%) rated having an advance plan for doctors to use in allocating ventilators as very or extremely important. They both voted similarly on a proposed policy for the use of the same criteria in deciding who gets ventilators (81% general public and 89% stakeholders). In determining what type of criteria to use in deciding about the use of scarce ventilators, both groups of participants identified the likelihood of recovery as the most important criterion (68% general public and 62% stakeholders). Both groups of participants rated occupation and age criteria at the lowest level of importance with the general public and stakeholders rating occupation at 17% and 12% respectively, and age at 20% for the general public and 11% for stakeholders. All of these occupation and age results are in the same lowest tier.

Individual Questions

The ventilator question that had the highest cumulative agreement from all nine meetings was in relation to the importance of having a plan in advance to pandemic influenza.

How important would it be to have our healthcare system plan in advance for how doctors would decide how to use available ventilators in a severe pandemic when there are simply not enough ventilators for all of the seriously sick people?

Not at all important (do not consider)	17	3%
Unimportant (but consider)	13	2%
-	0	0%
Moderately important	21	4%
-	24	4%
Very important	91	15%
Extremely important	432	72%
	598	

432 of those polled said that it was extremely important, and 87% said it was very important to extremely important to have a ventilator usage plan in advance of a severe pandemic.

The second most agreed to ventilator question was in favor of hospitals using the same criteria:

How important would it be that all the hospitals and doctors in Harris County use the same criteria to decide which patients get ventilators and which do not?

Not at all important (do not consider)	12	2%
Unimportant (but consider)	17	3%
-	10	2%
Moderately important	33	5%
-	44	7%
Very important	106	18%
Extremely important	380	63%
	602	

Nearly 500 people, 81%, said that it was very important to extremely important for hospitals to use the same specifications when determining which patients should have ventilator priority in the case of a pandemic.

Similar to vaccines and antivirals, age was not considered a top priority when determining who should be eligible for a ventilator:

How important would it be to use the available ventilators for people in a certain age group, even if the person's individual health status makes it less likely that the ventilator will help the person recover?

Not at all important (do not consider)	215	36%
Unimportant (but consider)	110	18%
-	51	8%
Moderately important	67	11%
-	40	7%
Very important	39	6%
Extremely important	81	13%
	603	

Over half, 54%, of the participants (from all nine meetings) said it was not at all important to unimportant to use age as a deciding factor when faced with scarcity of ventilator allocation.

D. Additional Polling Results by Location

In reviewing the polling results from the individual eight public engagement meetings, there are certain rankings that are worth highlighting.

Vaccines

While many of the participants rated vaccination healthcare workers either very or extremely important, Shirley Acres, the Chinese Community Center and the Berry Center had the highest percentages:

- 95% of Shirley Acres participants rated this question a 6 or 7
- 91% of the Chinese Community Center participants rated this a 6 or 7
- 91% of the Berry Center participants rated this a 6 or 7

Providing vaccines to people who have a medical condition that makes it more likely that they will get very sick or die received a large number of very important and extremely important rating and in Sunnyside was rated very or extremely important by 83% of the participants.

Antivirals

In two locations, “treating health care providers with flu-like symptoms” with antivirals received the highest percentage of very and extremely important ratings. Ninety-six percent of the Berry Center participants gave this either a 6 or 7 and ninety percent of the Riley Chambers participants gave this a 6 or 7.

Ninety-two percent of the Berry Center participants rated treating public safety workers with antivirals very or extremely important.

Most locations ranked the use of antivirals for people worried about catching pandemic flu as not at all important or unimportant. Percentages on average 60-80%; and a high of 82% of San Jacinto participants and 73% of the Riley Chambers participants rated this unimportant or not at all important.

The highest ranking antiviral question was: “Treat all health care providers”. In three locations, 85%-96% of participants rated this very or extremely important.

Ventilators

In two locations – San Jacinto and Berry Center – a high of 90% of the participants considered it extremely or very important to “have a plan in advance for how doctors decide how to use ventilators”. In all but one location, 84% or more of the participants rated this very or extremely important.

Ninety percent of Galena Park participants, eighty-four percent of the Shirley Acres participants and eighty-one percent of the Humble Center participants rated it very or extremely important that all hospitals and doctors use the same criteria for ventilators. In three locations, 81% or more of the participants rated this very or extremely important.

One ventilator question produced the low levels of 6's and 7's with most locations. Giving ventilators to those whose job is important to the functioning of society was rated very or extremely important by only 40%-59% of participants. Another produced relatively high levels of 1's and 2's. Giving ventilators to those of a certain age group, even if it is less likely to help them recover was rated unimportant or not at all important by 40%-66% of participants.

Variation by Location

The Berry Center meeting resulted in the highest concurrence. In four questions, over 90% of the participants gave a very important or extremely important rating:

- 96% “treat health care providers” - antiviral
- 92% “treat public safety workers with the flu”
- 91% “treat health care providers” - vaccinate
- 90% “plan in advance...for ventilators”

The Humble Center had the lowest overall concurrence. The highest two ratings were these:

- 87% “plan in advance for ventilators”
- 85% “treat health care providers” – vaccinate

In Sunnyside, one question produced the highest ‘moderately important’ response. Thirty-five percent of the participants rated it moderately important to always use age as a deciding factor in vaccination decisions.

The San Jacinto meeting produced the highest concurrence of not at all important and unimportant responses:

- 64% “use antivirals for people worried about catching the flu”
- 55% “use available ventilators for people in a certain age group”
- 51% “always use age as a deciding factor” - vaccinate

There was variation in the degree to which the participants from the different geographic areas of Harris County rated the different choices of subgroups for vaccines and antiviral drugs or potential policies for ventilators. Given 7 rating choices for each of the 19 questions polled, the participants produced 133 rating outcomes in each of 8 areas for a total of 1064 ratings. For the combined outcome of very or extremely important, the range of the difference for the 19 combined outcomes varied from a low of 13 percentage points for the question of whether or not occupation should be an important criterion for allocating ventilators (high consistency on this question), to a high of 52 percentage points of difference for the question of how important it is to provide antiviral drugs for public safety workers (low consistency on this question).

As can be noted from the tables presenting the results for each area, the geographic range in percentage point differences among the 8 geographic areas for the 19 very or extremely important combined rating outcomes was generally in the 20-25 percentage points range.

E. Discussion

When confronted with clearly defined difficult choices following day long deliberations about the allocation of scarce influenza vaccine, antiviral drugs, and ventilators, a large, geographically

representative sample of the general public of Harris County expressed clear, consistent preferences for the use of these resources. Interestingly, a sample of representatives from stakeholder organizations serving the County also expressed clear judgments nearly identical to those of the general public.

Strengths of this project include the large number of several hundred participants and their geographic, racial/ethnic, age, and gender diversity. This helps to establish that the findings reflect the perspectives of the larger body of residents of Harris County. Also helping to establish this conclusion is the general consistency of findings across the geographic areas and between the disinterested, non-partisan general public participants and the more invested stakeholder representatives. Third, these results were obtained only after informing the participants about the essential facts needed to have an informed discussion. Furthermore, the results represent not the “top-of-mind” public opinions that are often reported from telephone surveys of the public, but rather the considered judgments of Harris County residents after day long discussion and deliberation guided by neutral facilitators. Also helpful is the fact that the questions were presented to the participants as clear-cut choices and did not require much additional explanation to clarify the task that was being given to the participants. For all these reasons, the results from this project can be considered as robust findings.

Among the limitations of the project is the fact that the sample of participants was not a randomly chosen one, therefore, their conclusions cannot be extrapolated as representative of the entire Harris County population. Secondly, the amount of information given to the participants about influenza was limited, and it is possible that taking more time to present additional facts about the disease and the spread of a pandemic would have produced different ratings. Thirdly, while the sessions were conducted over one day from approximately 9am to 3pm, the amount of time devoted to three separate topics was limited to approximately one hour each. Additional time, as allowed in other similar projects devoted to only one topic, might have deepened participants’ understanding.

F. Conclusion

A geographically diverse, large sample of Harris County residents gathered together and consulted about difficult rationing choices which must be made to help finalize a plan for responding to a severe, future pandemic of influenza. They were informed about influenza, discussed the pros and cons of different choices, deliberated about difficult decisions, and produced clear and consistent preferences for the choices offered. These results appear robust and could be used by HCPHES and the Committee on Pandemic Influenza Medical Standards of Care to help finalize the next update of the county-wide plan in 2011-12.

Harris County - Comparison

Location	18-Jun		25-Jun		9-Jul		9-Jul		9-Jul		16-Jul		14-Jul		16-Jul		16-Jul		16-Jul		Totals	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1.) How important...to vaccinate persons who provide public safety services (police, fire, emergency response)																						
Not at all important (do not consider)	1	2%	2	3%	5	6%	2	4%	2	5%	0	0%	10	10%	2	2%	1	1%			25	4%
Unimportant (but consider)	2	4%	3	5%	6	7%	5	10%	2	5%	1	3%	6	6%	3	3%	2	2%			30	5%
-	2	4%	4	6%	3	4%	5	10%	2	5%	0	0%	4	4%	2	2%	6	6%			28	5%
Moderately important	12	26%	9	14%	12	14%	6	12%	1	2%	1	3%	23	24%	13	15%	9	10%			86	14%
-	5	11%	9	14%	5	6%	12	23%	3	7%	5	17%	13	14%	13	15%	17	18%			82	14%
Very important	10	22%	14	22%	14	16%	10	19%	3	7%	10	34%	16	17%	23	27%	20	21%			120	20%
Extremely important	14	30%	24	37%	40	47%	12	23%	31	70%	12	41%	24	25%	30	35%	39	41%			226	38%
	46		65		85		52		44		29		96		86		94				597	
2.) How important...to always use age as one of the deciding factors on who should get vaccinated?																						
Not at all important (do not consider)	22	51%	7	11%	22	26%	19	35%	14	30%	9	30%	27	26%	20	24%	24	26%			164	27%
Unimportant (but consider)	7	16%	12	18%	14	16%	8	15%	9	20%	10	33%	17	17%	10	12%	13	14%			100	17%
-	2	5%	8	12%	9	10%	5	9%	4	9%	2	7%	5	5%	8	10%	11	12%			54	9%
Moderately important	6	14%	23	35%	15	17%	7	13%	11	24%	4	13%	25	24%	17	20%	10	11%			118	20%
-	0	0%	5	8%	10	12%	6	11%	3	7%	2	7%	6	6%	7	8%	11	12%			50	8%
Very important	4	9%	7	11%	5	6%	6	11%	2	4%	3	10%	11	11%	10	12%	7	8%			55	9%
Extremely important	2	5%	4	6%	11	13%	3	6%	3	7%	0	0%	12	12%	11	13%	16	17%			62	10%
	43		66		86		54		46		30		103		83		92				603	
3.) How important...to use age only if an age group has a higher risk of illness or dying?																						
Not at all important (do not consider)	2	5%	2	3%	3	4%	3	6%	1	2%	0	0%	5	5%	7	8%	4	4%			27	4%
Unimportant (but consider)	3	7%	1	2%	4	5%	1	2%	1	2%	0	0%	4	4%	4	5%	3	3%			21	3%
-	0	0%	1	2%	1	1%	1	2%	0	0%	3	10%	2	2%	3	3%	5	5%			16	3%
Moderately important	4	9%	10	15%	8	9%	2	4%	2	4%	3	10%	13	13%	12	14%	2	2%			56	9%
-	2	5%	6	9%	7	8%	5	9%	8	17%	6	20%	12	12%	7	8%	11	12%			64	11%
Very important	10	23%	22	34%	20	24%	21	40%	11	23%	8	27%	33	33%	14	16%	21	22%			160	26%
Extremely important	23	52%	23	35%	42	49%	20	38%	24	51%	10	33%	31	31%	39	45%	48	51%			260	43%
	44		65		85		53		47		30		100		86		94				604	
4.) How important... to vaccinate gov't leaders who make decisions for the community?																						
Not at all important (do not consider)	16	36%	15	23%	24	28%	16	31%	9	20%	3	10%	35	35%	22	25%	20	22%			160	27%
Unimportant (but consider)	5	11%	13	20%	7	8%	10	20%	1	2%	5	17%	15	15%	11	13%	8	9%			75	12%
-	2	5%	7	11%	6	7%	4	8%	4	9%	4	13%	11	11%	11	13%	8	9%			57	9%
Moderately important	6	14%	10	16%	20	23%	4	8%	10	22%	8	27%	20	20%	14	16%	14	15%			106	18%
-	1	2%	6	9%	5	6%	6	12%	7	16%	8	27%	7	7%	5	6%	12	13%			57	9%
Very important	7	16%	6	9%	8	9%	4	8%	4	9%	2	7%	7	7%	7	8%	13	14%			58	10%
Extremely important	7	16%	7	11%	16	19%	7	14%	10	22%	0	0%	6	6%	17	20%	18	19%			88	15%
	44		64		86		51		45		30		101		87		93				601	

Location	18-Jun		25-Jun		9-Jul		9-Jul		9-Jul		16-Jul		14-Jul		16-Jul		16-Jul		16-Jul		Totals	
	Pasadena - San Jac		Sunnyside - Acres		Galena Park		Riley Chambers		Cy-Fair - Berry		Partner Mtg		Humble Civic		Chinese Cmty		Shirley Acres					
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
5.) How important...to vaccinate workers who provide critical societal functions like water, power, transportation?																						
Not at all important (do not consider)	5	12%	2	3%	9	11%	4	8%	0	0%	0	0%	13	13%	11	13%	10	11%	54	9%		
Unimportant (but consider)	7	16%	4	6%	11	13%	4	8%	3	6%	1	3%	10	10%	5	6%	4	4%	49	8%		
-	4	9%	7	11%	6	7%	6	11%	1	2%	1	3%	9	9%	5	6%	6	6%	45	7%		
Moderately important	5	12%	17	26%	18	21%	11	21%	5	11%	5	17%	29	29%	13	15%	14	15%	117	19%		
-	4	9%	13	20%	11	13%	14	26%	5	11%	11	38%	12	12%	15	17%	26	27%	111	18%		
Very important	7	16%	16	24%	11	13%	9	17%	8	17%	6	21%	13	13%	18	21%	9	9%	97	16%		
Extremely important	11	26%	7	11%	19	22%	5	9%	25	53%	5	17%	15	15%	19	22%	26	27%	132	22%		
	43		66		85		53		47		29		101		86		95		605			
6.) How important...to vaccinate people who have a condition that make it more likely they will get very sick or die from pan. flu?																						
Not at all important (do not consider)	2	5%	3	5%	8	9%	1	2%	3	6%	0	0%	9	9%	6	7%	4	4%	36	6%		
Unimportant (but consider)	1	2%	2	3%	2	2%	5	10%	2	4%	0	0%	3	3%	4	5%	4	4%	23	4%		
-	0	0%	1	2%	3	4%	2	4%	2	4%	2	7%	2	2%	2	2%	3	3%	17	3%		
Moderately important	5	12%	3	5%	11	13%	0	0%	4	8%	1	3%	10	10%	11	13%	12	13%	57	9%		
-	5	12%	2	3%	11	13%	3	6%	0	0%	3	10%	5	5%	7	8%	9	10%	45	7%		
Very important	10	24%	16	24%	12	14%	9	17%	14	29%	12	41%	33	33%	15	17%	14	15%	135	22%		
Extremely important	19	45%	39	59%	38	45%	32	62%	23	48%	11	38%	37	37%	41	48%	48	51%	288	48%		
	42		66		85		52		48		29		99		86		94		601			
7.) How important...to vaccinate health care providers so they can continue to provide care to patients?																						
Not at all important (do not consider)	1	2%	1	2%	3	4%	1	2%	1	2%	0	0%	2	2%	0	0%	0	0%	9	2%		
Unimportant (but consider)	1	2%	1	2%	1	1%	3	6%	0	0%	0	0%	1	1%	0	0%	0	0%	7	1%		
-	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%	2	0%		
Moderately important	2	4%	3	5%	4	5%	2	4%	1	2%	0	0%	6	6%	3	3%	1	1%	22	4%		
-	1	2%	3	5%	4	5%	1	2%	2	4%	0	0%	6	6%	4	5%	3	3%	24	4%		
Very important	10	22%	9	15%	5	6%	6	12%	1	2%	1	3%	15	15%	15	17%	8	9%	70	12%		
Extremely important	30	67%	45	73%	67	79%	38	75%	40	89%	29	97%	70	70%	64	74%	81	86%	464	78%		
	45		62		85		51		45		30		100		86		94		598			
8.) How important...to treat people sick w/ flu who have a medical condition that make it more likely they get very sick or die?																						
Not at all important (do not consider)	3	7%	1	2%	7	8%	3	6%	3	6%	2	7%	11	11%	4	5%	7	8%	41	7%		
Unimportant (but consider)	0	0%	1	2%	4	5%	0	0%	5	11%	1	3%	4	4%	3	4%	6	7%	24	4%		
-	0	0%	0	0%	3	4%	2	4%	2	4%	0	0%	1	1%	0	0%	2	2%	10	2%		
Moderately important	1	2%	5	8%	6	7%	4	8%	3	6%	2	7%	9	9%	8	9%	8	9%	46	8%		
-	5	11%	3	5%	6	7%	1	2%	2	4%	1	3%	5	5%	7	8%	8	9%	38	6%		
Very important	11	25%	11	17%	10	12%	7	14%	4	9%	11	37%	25	26%	14	16%	12	14%	105	18%		
Extremely important	24	55%	44	68%	49	58%	34	67%	28	60%	13	43%	42	43%	49	58%	45	51%	328	55%		
	44		65		85		51		47		30		97		85		88		592			

Location	18-Jun		25-Jun		9-Jul		9-Jul		9-Jul		16-Jul		14-Jul		16-Jul		16-Jul		16-Jul		Totals	
	Pasadena - San Jac		Sunnyside - Acres		Galena Park		Riley Chambers		Cy-Fair - Berry		Partner Mtg		Humble Civic		Chinese Cmty		Shirley Acres					
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
9.) How important...to treat people sick with the flu even if they are likely to recover fully w/out antivirals?																						
Not at all important (do not consider)	12	27%	7	11%	23	27%	15	28%	15	33%	6	20%	16	16%	20	24%	14	15%	128	21%		
Unimportant (but consider)	12	27%	12	18%	20	23%	10	19%	6	13%	11	37%	20	20%	16	20%	22	24%	129	22%		
-	4	9%	11	17%	5	6%	3	6%	0	0%	2	7%	9	9%	8	10%	7	8%	49	8%		
Moderately important	7	16%	18	27%	14	16%	7	13%	10	22%	4	13%	26	27%	13	16%	12	13%	111	19%		
-	1	2%	7	11%	8	9%	8	15%	1	2%	2	7%	3	3%	8	10%	8	9%	46	8%		
Very important	7	16%	7	11%	4	5%	3	6%	3	7%	3	10%	9	9%	5	6%	10	11%	51	9%		
Extremely important	2	4%	4	6%	12	14%	7	13%	10	22%	2	7%	15	15%	12	15%	19	21%	83	14%		
	45		66		86		53		45		30		98		82		92		597			
10.) How important...to always use age as one of the factors on receiving antivirals? (multiple choice)																						
Not at all important (do not consider)	20	44%	17	26%	20	23%	21	40%	18	38%	11	35%	26	27%	28	32%	23	26%	184	30%		
Unimportant (but consider)	11	24%	13	20%	14	16%	10	19%	12	25%	6	19%	20	21%	8	9%	17	19%	111	18%		
-	4	9%	9	14%	7	8%	5	9%	2	4%	4	13%	7	7%	6	7%	12	13%	56	9%		
Moderately important	3	7%	12	18%	13	15%	7	13%	6	13%	6	19%	17	18%	20	23%	11	12%	95	16%		
-	0	0%	8	12%	9	10%	3	6%	1	2%	4	13%	8	8%	9	10%	10	11%	52	9%		
Very important	4	9%	3	5%	13	15%	3	6%	2	4%	0	0%	10	10%	4	5%	4	4%	43	7%		
Extremely important	3	7%	4	6%	11	13%	4	8%	7	15%	0	0%	8	8%	13	15%	13	14%	63	10%		
	45		66		87		53		48		31		96		88		90		604			
11.) How important...to use age ...only if a specific age group is at higher risk of illness and death?																						
Not at all important (do not consider)	3	7%	2	3%	5	6%	5	9%	3	6%	0	0%	5	5%	6	8%	2	2%	31	5%		
Unimportant (but consider)	3	7%	2	3%	1	1%	1	2%	2	4%	0	0%	3	3%	3	4%	5	6%	20	3%		
-	1	2%	1	2%	2	2%	1	2%	0	0%	2	6%	4	4%	2	3%	3	3%	16	3%		
Moderately important	3	7%	10	15%	7	8%	1	2%	6	13%	2	6%	14	15%	11	14%	9	10%	63	11%		
-	3	7%	5	8%	7	8%	5	9%	3	6%	3	10%	6	6%	5	6%	10	11%	47	8%		
Very important	15	34%	23	35%	20	24%	16	29%	7	15%	15	48%	21	22%	13	17%	18	21%	148	25%		
Extremely important	16	36%	22	34%	42	50%	26	47%	26	55%	9	29%	42	44%	38	49%	40	46%	261	45%		
	44		65		84		55		47		31		95		78		87		586			
12.) How important...to use antivirals for people worried about catching flu even if it means some sick wont have them?																						
Not at all important (do not consider)	29	64%	27	42%	43	51%	32	60%	23	50%	21	72%	52	52%	38	45%	36	39%	301	50%		
Unimportant (but consider)	8	18%	12	18%	10	12%	7	13%	8	17%	3	10%	8	8%	6	7%	7	8%	69	12%		
-	2	4%	6	9%	3	4%	1	2%	3	7%	2	7%	6	6%	4	5%	4	4%	31	5%		
Moderately important	2	4%	7	11%	6	7%	5	9%	5	11%	1	3%	6	6%	10	12%	11	12%	53	9%		
-	0	0%	6	9%	3	4%	3	6%	3	7%	0	0%	5	5%	11	13%	9	10%	40	7%		
Very important	1	2%	4	6%	5	6%	2	4%	1	2%	0	0%	13	13%	5	6%	5	5%	36	6%		
Extremely important	3	7%	3	5%	15	18%	3	6%	3	7%	2	7%	10	10%	10	12%	20	22%	69	12%		
	45		65		85		53		46		29		100		84		92		599			

Location	18-Jun		25-Jun		9-Jul		9-Jul		9-Jul		16-Jul		14-Jul		16-Jul		16-Jul		16-Jul		Totals	
	Pasadena - San Jac		Sunnyside - Acres		Galena Park		Riley Chambers		Cy-Fair - Berry		Partner Mtg		Humble Civic		Chnese Cmty		Shirley Acres					
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
13.) How important...to treat health care providers ill w/ flu to help recover and resume providing care?																						
Not at all important (do not consider)	3	7%	1	2%	4	5%	2	4%	0	0%	0	0%	3	3%	4	5%	3	3%			20	3%
Unimportant (but consider)	0	0%	1	2%	1	1%	0	0%	0	0%	0	0%	2	2%	1	1%	1	1%			6	1%
-	0	0%	0	0%	1	1%	0	0%	0	0%	0	0%	1	1%	0	0%	2	2%			4	1%
Moderately important	0	0%	5	8%	4	5%	1	2%	1	2%	0	0%	8	8%	3	4%	2	2%			24	4%
-	2	5%	3	5%	4	5%	2	4%	1	2%	1	3%	10	11%	5	6%	10	11%			38	7%
Very important	7	16%	10	16%	14	17%	7	14%	4	9%	3	10%	9	9%	12	15%	9	10%			75	13%
Extremely important	31	72%	44	69%	56	67%	37	76%	39	87%	27	87%	62	65%	57	70%	63	70%			416	71%
	43		64		84		49		45		31		95		82		90				583	
14.) How important...to treat public safety workers ill w/ flu so they can continue to provide services?																						
Not at all important (do not consider)	4	9%	0	0%	5	6%	1	2%	0	0%	0	0%	5	5%	3	3%	4	4%			22	4%
Unimportant (but consider)	1	2%	1	2%	1	1%	3	6%	1	2%	0	0%	2	2%	2	2%	1	1%			12	2%
-	1	2%	1	2%	1	1%	1	2%	1	2%	0	0%	4	4%	2	2%	2	2%			13	2%
Moderately important	3	7%	8	12%	9	11%	7	14%	1	2%	0	0%	20	21%	9	10%	8	9%			65	11%
-	3	7%	14	22%	7	8%	11	22%	1	2%	3	10%	17	18%	7	8%	12	13%			75	13%
Very important	13	30%	19	29%	21	25%	10	20%	4	9%	13	42%	17	18%	21	24%	17	18%			135	23%
Extremely important	19	43%	22	34%	41	48%	17	34%	38	83%	15	48%	29	31%	43	49%	48	52%			272	46%
	44		65		85		50		46		31		94		87		92				594	
15.) How important to have a plan in advance for how doctors decide how to use ventilators?																						
Not at all important (do not consider)	2	5%	2	3%	2	2%	1	2%	1	2%	0	0%	4	4%	3	3%	2	2%			17	3%
Unimportant (but consider)	1	2%	2	3%	3	3%	1	2%	1	2%	0	0%	2	2%	2	2%	1	1%			13	2%
-	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%			0	0%
Moderately important	0	0%	0	0%	4	5%	2	4%	3	6%	0	0%	4	4%	5	6%	3	3%			21	4%
-	1	2%	5	8%	3	3%	2	4%	0	0%	2	8%	2	2%	4	4%	5	5%			24	4%
Very important	7	16%	17	27%	14	16%	10	19%	6	13%	5	19%	17	18%	8	9%	7	7%			91	15%
Extremely important	32	74%	36	58%	61	70%	36	69%	37	77%	19	73%	66	69%	67	75%	78	81%			432	72%
	43		62		87		52		48		26		95		89		96				598	
16.) How important...that all hospitals & doctors use the same criteria to decide who gets ventilators?																						
Not at all important (do not consider)	1	2%	1	2%	1	1%	1	2%	0	0%	0	0%	2	2%	3	4%	3	3%			12	2%
Unimportant (but consider)	0	0%	4	6%	2	2%	3	6%	2	4%	0	0%	2	2%	2	2%	2	2%			17	3%
-	0	0%	0	0%	1	1%	3	6%	1	2%	0	0%	2	2%	2	2%	1	1%			10	2%
Moderately important	3	7%	4	6%	3	3%	3	6%	4	8%	2	7%	6	6%	6	7%	2	2%			33	5%
-	5	12%	8	12%	1	1%	6	11%	4	8%	1	4%	7	7%	5	6%	7	7%			44	7%
Very important	9	21%	22	33%	21	24%	7	13%	3	6%	4	15%	19	19%	8	10%	13	14%			106	18%
Extremely important	24	57%	27	41%	57	66%	30	57%	35	71%	20	74%	63	62%	58	69%	66	70%			380	63%
	42		66		86		53		49		27		101		84		94				602	

Location	18-Jun		25-Jun		9-Jul		9-Jul		9-Jul		16-Jul		14-Jul		16-Jul		16-Jul		16-Jul		Totals	
	Pasadena - San Jac		Sunnyside - Acres		Galena Park		Riley Chambers		Cy-Fair - Berry		Partner Mtg		Humble Civic		Chnese Cmty		Shirley Acres					
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
17.) How important...to use only a person's individual likelihood of recovery to determine if they get a ventilator?																						
Not at all important (do not consider)	2	5%	4	6%	3	3%	4	7%	4	8%	1	4%	8	9%	7	9%	6	6%			39	7%
Unimportant (but consider)	2	5%	7	11%	2	2%	2	4%	2	4%	1	4%	3	3%	4	5%	2	2%			25	4%
-	0	0%	4	6%	2	2%	1	2%	1	2%	1	4%	2	2%	2	2%	3	3%			16	3%
Moderately important	4	9%	7	11%	3	3%	1	2%	3	6%	1	4%	7	7%	6	7%	8	8%			40	7%
-	5	11%	10	16%	4	5%	6	11%	5	10%	6	23%	11	12%	13	16%	11	11%			71	12%
Very important	9	20%	12	19%	17	20%	12	22%	9	19%	7	27%	15	16%	12	15%	21	22%			114	19%
Extremely important	22	50%	20	31%	55	64%	28	52%	24	50%	9	35%	48	51%	38	46%	45	47%			289	49%
	44		64		86		54		48		26		94		82		96				594	
18.) How important...for those whose job is important to functioning of society, even if it is less likely to help them?																						
Not at all important (do not consider)	19	42%	20	32%	34	39%	22	41%	18	39%	5	19%	29	31%	24	29%	30	31%			201	34%
Unimportant (but consider)	7	16%	13	21%	17	19%	9	17%	6	13%	7	27%	17	18%	9	11%	9	9%			94	16%
-	6	13%	10	16%	4	5%	7	13%	3	7%	4	15%	6	6%	5	6%	15	16%			60	10%
Moderately important	6	13%	7	11%	14	16%	7	13%	8	17%	4	15%	19	20%	16	19%	9	9%			90	15%
-	1	2%	6	10%	6	7%	3	6%	3	7%	3	12%	4	4%	11	13%	13	14%			50	8%
Very important	2	4%	4	6%	3	3%	1	2%	1	2%	2	8%	2	2%	4	5%	4	4%			23	4%
Extremely important	4	9%	3	5%	10	11%	5	9%	7	15%	1	4%	17	18%	14	17%	16	17%			77	13%
	45		63		88		54		46		26		94		83		96				595	
19.) How important...for those of a certain age group, even if it is less likely to help them recover? (multiple choice)																						
Not at all important (do not consider)	24	55%	13	20%	37	42%	26	48%	21	43%	4	15%	31	33%	35	40%	24	25%			215	36%
Unimportant (but consider)	5	11%	19	29%	13	15%	7	13%	8	16%	11	41%	17	18%	16	18%	14	15%			110	18%
-	4	9%	9	14%	5	6%	4	7%	3	6%	5	19%	2	2%	5	6%	14	15%			51	8%
Moderately important	6	14%	7	11%	11	13%	4	7%	4	8%	1	4%	15	16%	10	11%	9	9%			67	11%
-	0	0%	6	9%	5	6%	6	11%	4	8%	3	11%	8	9%	5	6%	3	3%			40	7%
Very important	1	2%	4	6%	7	8%	3	6%	0	0%	2	7%	5	5%	5	6%	12	13%			39	6%
Extremely important	4	9%	7	11%	10	11%	4	7%	9	18%	1	4%	15	16%	11	13%	20	21%			81	13%
	44		65		88		54		49		27		93		87		96				603	