Maricopa County Department of Public Health

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Quality Improvement-Vital Statistics Data Sharing with Epidemiologists in Local Health Departments in North Carolina

Survey Analysis Report

OFFICE OF EPIDEMIOLOGY

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**Introduction**

The Maricopa County Department of Public Health Office of Epidemiology created this survey to assess vital registration data sharing practices between state and local health jurisdictions as part of a quality improvement project funded by the Robert Wood Johnson Foundation. The goal of the project is to improve the timeliness of death record data flow from state health departments to data users, primarily epidemiologists in local health departments. The questions included in this survey will help us gather information about the types of death record data provided to local epidemiologists by state vital records offices. This survey was created in SurveyMonkey.com and accessed from December 12, 2014 to December 29, 2014. This survey was sent to Deputy Registrars and Public Health/Epidemiology county staff in North Carolina.

 There were 29 questions in this survey. A total of 45 respondents completed the survey questionnaire. During the questionnaire participants were asked accessibility to different types of death data (real-time or live data, individually identifiable death data, de-identified death data, aggregate statistics), timeliness of data flow, uses of death data as well as barriers to obtain access death data.

**Section1. Basic information (State, County, Name, Email, Job Title)**

A total of 45 participants responded to the survey from 40 different counties/jurisdictions in North Carolina. The following map shows the counties represented in the survey.

**Map 1: Survey responses by County**

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**Figure 1.** The following figure shows the number and distribution of the participants’ job title. There was a 100% response rate for job title.

Of the participants that completed the questionnaire, 20 (44%) work in Public Health area (Health Director, Health Educator, Epidemiologist, Data Analyst, Director of Nursing), 16 (36%) as Processing Assistant or Deputy Registrar, 7 (16%) as Administrative Assistant and 2 (4%) as Accounting Technician.

**Section2. Data Set User Agreement**

**Question 7:** Does your office or program have a data user agreement with your state vital statistics office? There was a 100% response rate.

**Figure 2.** The following figure shows the percentage of answers for Question 7.

**Section3. Questions about De-identified Death Data Sets Accessibility, Timeliness of Data Flow, and How Interested in Receiving De-identified Death Data.**

**Question 8:** Does your state vital statistics office send you de-identified death data? There was a 95.6% response rate, with 2 responses missing.

**Figure 3.** The following figure shows the percentage of answers for Question 8.

**Question 9:** On a scale of 1 to 5, how interested are you in receiving de-identified death data from your state vital statistics office? (1=not interested, 5=very interested)

If participants answered “Yes” in Question 8, he/she would skip to Question 10; otherwise he/she would answer Question 9. There was an 80% response rate, with 9 responses missing.

**Figure 4.** The following figure shows the percentage of answers for Question 9.

**Question 10:** How often do you receive de-identified death data sets? If participants answered “Yes” in Question 8, he/she would answer this question (N=10). There was a 100% response rate.

**Figure 5.** The following figure shows the percentage of answers for Question 10.

**Question 11:** What is the average time difference between receipt of de-identified death data sets and date of death? If participants answered “No” or “Don’t know” in Question 8, he/she would skip this question (N=33). There was a 100% response rate.

**Figure 6.** The following figure shows the percentage of answers for Question 11.

**Section4. Questions about Real Time Death Data Sets Accessibility, Timeliness of Data Flow, and How Interested in Receiving Real Time Death Data.**

**Question 12:** Does your office or program have access to real-time or “live” death data from your state vital statistics office? There was a 91% response rate, with 4 responses missing.

**Figure 7.** The following figure shows the percentage of answers for Question 12.

**Question 13:** On a scale of 1 to 5, how interested are you in having access to real-time death data from your state vital statistics office? (1=not interested, 5=very interested)

If participants answered “Yes” in Question 12, he/she would skip to Question 14; otherwise he/she would answer Question 13. There was a 92.7% response rate, with 3 responses missing.

**Figure 8.** The following figure shows the percentage of answers for Question 13.

**Question 14:** On a scale of 1 to 5, how would you rank your capacity to utilize real-time death data?

There was a 91.1% response rate, with 4 responses missing.

**Figure 9.** The following figure shows the percentage of answers for Question 14.

**Section5. Questions about Individual Identifiable Death Record Data Sets Accessibility, Timeliness of Data Flow, and How Interested in Receiving Individual Identifiable Death Record Data.**

**Question 15:** Does your office or program receive individually identifiable death record data in static (not real-time or live) form from your state vital statistics office? There was an 88.8% response rate, with 10 responses missing.

**Figure 10.** The following figure shows the percentage of answers for Question 15.

**Question 16:** On a scale of 1 to 5, how interested are you in having access to individually identifiable death record data from your state vital statistics office? (1=not interested, 5=very interested)

If participants answered “Yes” in Question 15, he/she would skip to Question 17; otherwise he/she would answer Question 16. There was an 88.5% response rate, with 3 response missing.

**Figure 11.** The following figure shows the percentage of answers for Question 16.

**Question 17:** How often do you receive individual identifiable death record data?

If participants answered “No” or “Don’t Know” in Question 15, he/she would skip this question. There was an 87.0% response rate, with 3 responses missing.

**Figure 12.** The following figure shows the percentage of answers for Question 17.

**Question 18:** What is the average time difference between the time you receive individual identifiable death record data and date of death? There was a 100% response rate.

**Figure 13.** The following figure shows the percentage of answers for Question 18.

**Section6. Questions about Aggregate Statistics or Reports on Death Data Sets Access, Timeliness of Data Flow, and How Interested in Receiving Aggregate Statistics or Reports on Death Data Sets.**

**Question 19:** Does your office or program receive aggregate statistics or reports on death data sets from your state vital statistics office? There was a 91.1% response rate, with 4 responses missing.

**Figure 14.** The following figure shows the percentage of answers for Question 19.

**Question 20**: On a scale of 1 to 5, how interested are you in having access to aggregate statistics or reports from your state vital statistics office? (1=not interested, 5=very interested)

If participants answered “Yes” in Question 19, he/she would skip to Question 21; otherwise he/she would answer Question 20. There was a 88% response rate, with 3 responses missing.

**Figure 15.** The following figure shows the percentage of answers for Question 20.

**Question 21:** How often do you receive aggregate statistics or reports on death data?

If participants answered “No” or “Don’t’ know” in Question 19, he/she would skip this question. There was a 95% response rate, with 1 response missing.

**Figure 16.** The following figure shows the percentage of answers for Question 21.

**Question 22:** What is the average time difference between receipt of aggregate statistics or reports on death data and date of death? If participants answered “No” or “Don’t’ know” in Question 19, he/she would skip this question. There was a 90% response rate, with 2 responses missing.

**Figure 17.** The following figure shows the percentage of answers for Question 22.

**Section7. Questions about Other Type of Death Data Sets Accessibility, Uses, Barriers to obtain access to data, and Comments.**

**Question 23:** Does your office or program receive any other type of death data not mentioned above?

 There was an 88.9% response rate, with 5 responses missing.

**Figure 18.** The following figure shows the percentage of answers for Question 23.

**Question 24:** Please describe the type of death data that you receive and was not mentioned previously.

If participants answered “No” or “Don’t’ know” in Question 23, he/she would skip this question. There was a 100% response rate. This is an open text question. According to the responses, we categorized the answers into 3 different categories: Death certificates, Mortality Report and Child fatality review record.

**Figure 19.** The following figure shows the percentage of answers for Question 24.

**Question 25:** How is your office or program using death data? Please describe. This was an open text question. According to the responses, we categorized the answers into 4 different categories: Use data for Disease Surveillance/ Case Investigation/ Mortality Analyses, for Grant Application, for Health Impact Assessment, and for Evaluation of Intervention/Making Program Decision. There was a 57.8% response rate, with 19 responses missing.

**Figure 20.** The following figure shows the percentage of answers for Question 25.

**Question 26:** If you were given access to death data that you currently do not receive, how would you use this data? This was an open text question. According to the responses, we categorized the answers into 8 different categories: Health Education, Justify Claims to the Public, Monitor Mortality Trend, Child Fatality Prevention, Health Impact Assessment, Develop Public Health Strategies, Disease Prevention, and Grant Application. There was a 60% response rate, with 18 responses missing.

**Figure 21.** The following figure shows the percentage of answers for Question 26.

**Question 27:** For death data that you already receive, how would you use this data differently if you were able to receive it more frequently? This was an open text question. According to the responses, we categorized the answers into 4 different categories: Get more information/ updated report, Progressive Health Education, Earlier plan, and Disease Prevention/ Monitor Mortality Trend. There was a 55.6% response rate, with 20 responses missing.

**Figure 22.** The following figure shows the percentage of answers for Question 27.

**Question 28:** Please describe barriers that your office or program has encountered to obtain access to death data. This was an open text question. According to the responses, we categorized the answers into 4 different categories: Lag Time, Confidential Issue, Complex User Agreement Process, and Systemic/ Technology Issue. There was a 53.3% response rate, with 21 responses missing.

**Figure 22.** The following figure shows the percentage of answers for Question 28.

**Question 29:** Additional Comments. This was an open text question. There were no further comments from participants.

**Section8. Comparing results for different types of data.**

**Figure 24.** The following figure compares jurisdiction accessibility by different types of death data.

**Figure 25.** The following figure shows the comparison in how interested jurisdictions are in receiving different types of death data.

**Section9. Summary of Analysis:**

A total of 29 questions were asked to gather information on accessibility to different types of death data, timeliness of data flow, uses of death data as well as barriers to obtain access death data. Eighty-nine participants completed this questionnaire. The participants were from 40 different counties/jurisdictions. Among the counties that did not respond to the survey, most were in the middle regions of the North Carolina.

From the comparison Figure 24 and Figure 25, the most two frequently received data sets by local health departments were individual identifiable death record data 19 (45%) and aggregate statistics/ report on death data 20 (49%). Among the four different types of death data, 23(60%) participants were interested or very interested in receiving real-time death data, while 21 (58%) participants were interested or very interested in receiving de-identified death data. Most local health departments have use death data for health impact assessment (N=9, 35%). During the survey participants were also asked about the barriers to obtain access to death data, the most common barrier for using the death data was lag time (N=9, 56%). Besides the four death data types that we asked about in the survey (real-time or live data, individually identifiable death data, de-identified death data, aggregate statistics), 5 (12%) local health departments indicated they also receive individual death certificates as well.

The current proposed goal for the Robert Wood Johnson Foundation quality improvement project is to have individually identifiable death data available to local health departments at least quarterly. In order to determine the proportion of survey respondents that would benefit from the project as currently proposed, we excluded the number of respondents who have access to live data (n=4) and the number of respondents that receive individually identifiable data at least quarterly (n=16). In summary, we estimate our proposed project would benefit 55% (n=25) of respondents.

If we could have de-identified death data available to local health departments at least quarterly, we would benefit 77.8% (n=35) of respondents. If we could have the aggregate statistics or reports on death data available to local health departments at least quarterly, we would benefit 68.9% (n=31) of respondents.