Conference for Food Protection – Committee FINAL Report

COMMITTEE NAME: Standardized Data Collection and Electronic Reporting of Inspections

COUNCIL or EXECUTIVE BOARD ASSIGNMENT: II

DATE OF REPORT: November, 2013 (revised February 16, 2014)

SUBMITTED BY: Co-Chairs: Ann Marie McNamara and Sheri Morris

COMMITTEE CHARGE(s): **Issue #: 2012 II-035**

Charge: The Conference recommends that a committee be created to study how health department inspection data can be collected more uniformly through the use of standardized formats to enhance public health. Utilizing Food Code Annex 7, Form 3-A (Food Establishment Inspection Form) and Guide 3-B (Instructions for Marking the Food Establishment Inspection Report, Including Food Code References for Risk Factors/Interventions and Good Retail Practices) as the starting point, the committee is charged to consider:

1   (1) Uniform violation categories/types, by utilizing the FDA inspection form,
2   (2) Consistent scoring methodology, and
3   (3) The best means of electronically collecting, analyzing and sharing inspection data.
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These activities should be undertaken with the intent of eventually creating a national database to warehouse inspection data from contributing states, local jurisdictions and other sources.

The committee will report on its findings, along with implementation recommendations at the 2014 CFP Biennial Meeting.

COMMITTEE ACTIVITIES AND RECOMMENDATIONS:

I.   Progress on Overall Committee Activities:

1. **Sub-committee Structure and Approach**

    a. The Standardized Data Collection and Electronic Reporting of Inspections Committee (hereafter referred as SDCERIC) is a very large committee comprised of 37 members from state, local, and federal government agencies; consumer groups, academia; the retail and food service industries; and computer software companies. This large number of members is indicative of the importance of this committee to its members. Members are very passionate to see this enterprise succeed. No one who requested to be on this committee was excluded from membership.

    b. Initially, the entire SDCERIC participated in the series of conference calls to develop he pro's and con's for health departments in developing electronic databases for health inspection results reporting and to determine whether Form 3-A could be used for standardizing data elements in a national database. SDCERIC then split into two subcommittees to better make use of our member's expertise toward accomplishing our goals as follows:

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i. The IT Subcommittee was led by co-chairs Darryl Booth and Ann Marie McNamara.

ii. The Scoring Subcommittee was led by co-chairs, Sheri Morris and Ann Marie McNamara.

iiii. All committee members were invited to participate in any subcommittee activity.

2. **Executive Summary**

a. The SDCERIC is confident that a national database of health inspection reports is feasible. We have identified several projects that have accomplished at least some of the goals we have considered.

b. We encourage state and local health departments to adopt a uniform method of data collection such as Form 3-A, but we do not require it for a successful outcome. Neither is a uniform scoring method a necessity.

c. We recommend a "pull" method that gathers information from state and local health department's inspection forms rather than requiring them to "push" data to a centralized database.

d. The IT Sub-Committee recommends the commissioning of a computer system (software and hardware) capable of discovering, collecting, transforming, storing, and reporting inspection results in either 1) a non-standardized format (e.g. publically posted inspection results), or 2) a yet-to-be-specified standard file format. While the standard data streams should be preferred, the non-standard data streams are still of value.

e. The minimum requirement for a national database to succeed is that state and local health departments publish their health inspection reports on a website.

3. **Outcome of Each Assigned Committee _Charge (Note:_** SDCERIC determined that to effectively discuss the charges, it was best to do so out of order as listed in the original charge)

II. **Charge (3) - The best means of electronically collecting, analyzing and sharing inspection data**

This SDCERIC began deliberations using a very traditional database development approach of trying to develop

a consistent data standards of violation types/elements for a database, consistent scoring method, and

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b. building the database around those elements. This approach would require state and local health departments to voluntarily standardize and publish their health inspection data according to a documented standard. Adoption would be slow.

c. This approach, although attractive to corporate brand owners, policy makers, consumers and academia, is not particularly attractive to local health departments. The motives to establish and maintain the data-flows from the local to the consolidated database system are not that compelling. It places higher costs and responsibility for compliance to data standards on the health departments, which would need to send electronic data to a national database (The "push" strategy of data management). Without a national requirement and financial remuneration, this traditional approach is likely to struggle or fail at the local level.

d. A recommended approach to quickly populating a national database is to "pull" data from existing (likely non-standard formats) as well as those data streams made available according to a published standard, which the agency and/or its vendor must choose to support.

e. In this model a centralized database "pulls" many health inspection results reported to the web into the database. This flow does not require a health department to conform to a data standard (such as Form 3-A). Health departments would simply publish their existing health inspection results to the web. The centralized database then scours the internet, searching for key data elements to add to the database. This is the model currently being used by Google, the University of Maryland, Yelp, and some private databases for mining inspection data.

f. At the same time, the committee advocates a published standard, which, if adopted, provides a superior data stream.

g. A "pull" approach would garner greater adoption and would require fewer resources of each health department. It would not require health inspection data to conform to a national standard. In a model cost analysis (IT Subcommittee Report, attached) the cost to a state or local health department for publishing their current health inspection reports to the web would be minimal ($0 for health departments already publishing reports, to an estimated $10 - $20,000 for those not currently publishing reports). This approach would also be more responsive to local and regional regulatory changes to the inspection form, acknowledging that the FDA Model Food Code exists in many varied levels of adoption/equivalency.

h. The CFP could simply recommend that each health department publish its results to the web, a notion that has inherent value to public health. Those entities willing and able to adopt a published standard represent a superior/preferred data flow that will grow over time.

i. The "pull" approach places the burden of centralizing the data and searching the web for key data elements on the database management system. The development of such a centralized database was estimated at $428,250.00. However, databases already exist that could be modified for less money.

III. **Charge (1) - Uniform violation categories/types, by utilizing the FDA inspection Form 3-A**

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1. The Committee met in a series of conference calls to discuss the experiences of five states in developing and utilizing electronic databases for health inspection reporting. These states were: Pennsylvania, Ohio, Minnesota, Wisconsin, and North Carolina. In brief, the Committee discussed and identified the following advantages to health departments that developed electronic databases for health inspection reporting:

    a. Better staff uniformity in reporting violations due to training efforts
    b. Tablets are used by inspectors in the field
    c. Predefined comments can be selected decreasing inspection time
    d. Inspector leaves a printed version with the restaurant
    e. Electronic inspections can be accessed for consumers and others to see
       f. Cost savings were noted over manual system costs once the system was implemented

2. **The Committee identified pitfalls in developing an electronic database. These included:**

    a. Teaching inspectors to use an electronic data system was a stumbling block

    b. No scoring system: only scoring is done by a count of risk factor violations and "repeats"

    c. Internal assessments being done of (IN/Out/NA/NO of compliance) and (overall) compliance

    d. Initial cost of database development and tablets

3. **The difficulty in harmonizing multiple health inspection forms was deliberated and acknowledged**.

    The committee debated whether a standardized health inspection format, such as Form 3-A, could be utilized to develop uniform violation categories and types for developing standardized formats for a national database. The committee concluded that Form 3-A should be used to form the data elements of a national database because these data elements were originally developed and vetted by a previous CFP committee and the data elements were originally chosen based on their public health significance. Industry members cited the development of commercial, electronic databases for health inspection reports using existing state and local health inspection reporting formats and mapping inspection content to Form 3-A for reporting purposes. The desired outcome is a multi-tiered database that can encompass health inspection reports utilizing Form 3-A in its entirety (standardized datasets), as well as health inspection reports in which comparable data elements can be mapped to Form 3-A (non-standardized data sets).

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4.   **Conclusion**

The SDCERIC concluded that Form 3-A could be used for developing standardized data collection elements (datasets) of public health significance for a national database. Further, the IT Sub-Committee determined that a "pull" strategy that incorporates both standardized (Form 3-A) and non-standardized datasets that map to Form 3-A allows the development of a national database that can be developed immediately without universal adoption of Form 3-A by health departments.

IV.   C**harge (2) - Consistent scoring methodology**

1. The Scoring Sub-Committee had several conference calls to review and discuss various scoring systems. Several studies and published articles were reviewed and previous CFP committee reports were shared. The Committee quickly realized that without data linking different scoring methods to public health outcomes, choosing one scoring system over another simply became a matter of personal preference. The sub-committee also learned that FDA was working with NACCHO on collecting data relative to inspection scoring and was also incorporating data collection points in the upcoming Retail Food Risk Factor Study. For this reason, the sub-committee decided that any single method of scoring health inspections, could not be proven scientifically to show a better public health outcome, and therefore, could not be chosen for inclusion in a national database.

2. It was also recognized that using a "pull" approach to develop a national database, a consistent scoring method is not essential to database development. Scoring methods could be determined and evaluated at will, once data has been 'pulled' and the data elements available through the national database.

Recommendations for consideration by Council:

That the Final Report of this Committee be acknowledged by the Council, the Committee be disbanded for completion of assigned charges, and that Council further consider the other three issues submitted by this Committee.

The Co-Chairs would like to thank the members of the SDCERIC and the organizations / agencies they represent that allowed them to participate in this Committee and its work. The expertise and significant time and effort brought to the SDCERIC and the passion for the charge resulted in successful committee results and Council issues that clearly address the assigned charges.

The Committee Co-Chairs would also like to recognize and thank the Co-Chair of the IT Subcommittee, Darryl Booth, for his expertise and significant time and effort in coordinating the work and preparation of the IT Subcommittee report.

CFP ISSUES TO BE SUBMITTED BY COMMITTEE:

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1. <u>Standardized Data Collection / Electronic Reporting of Inspections Committee Report</u>: Acknowledgement of the committee report and attachments, thanking the members, and dissolving the Committee, as the charges have been completed.

2. <u>Public Website Posting of Inspection Reports</u>: Modifying Food Code language in Annex 3 section 8-304.11 to encourage regulatory authorities to provide copies of inspection reports to the public through website databases. Example language:

   To promote access to inspection results for public health purposes, the regulatory authority is encouraged to treat the inspection report as a public document and should be encouraged to make it available, ***preferably electronically on a public website,*** for disclosure to a person who requests it as provided by Law.

3. <u>Continued Data Collection to Determine Public Health Scoring</u>:   FDA continue exploring ways, such as the current work with NACCHO and data collection with the Risk Factor Studies, to determine if there is a public health impact related to scoring, and if one scoring system has a greater public health impact.

4. <u>Publish the IT Subcommittee Report as a "White Paper" on the CFP Website</u>: The IT Sub-Committee report, titled as a "White Paper" be posted on the CFP website under the section "Conference Developed Guides and Documents."

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