Minutes for SB 85 Commission

Attending: Robert Timmons, Margaret DiTulio, Rep Jeffrey Salloway, Rep Bill Nelson, Rep Gary Woods, Mindi Messmer, Amy Costello, Katie Bush, Mike Wimsatt

1) Call to Order at 10:15
2) Approval of minutes from 11/22/19

   Motion to approve by Gary Woods, second by Mike Wimsatt, all in favor

3) Development of a paradigm for creating a final report: Rep Jeffrey Salloway
   a. Rep Salloway introduced himself as a retired professor from UNH; Chair of Health Management and Policy; as Rep, Committee of Health Human Services and Aging; training in social medicine, interested in environment health;
   b. Overview of his remarks:
      i. What does the Commission know?
      ii. How does the Commission know it?
      iii. What does the Commission not know?
      iv. What does the Commission have to do to know what the Commission does not know?

Copy of remarks provided by Rep Salloway; notes from Commission meeting discussion in italics:

I. Introduction

A. Developing a paradigm for an interim report.
   1. Not content oriented
   2. Process oriented
      a. How do we craft an overview, a set of general principles which guides policy regarding environmental risk and chronic disease?

II. Overarching question

A. Quoting Rumsfeld: What do we know? What do we not know?
   1. A useful paradigm for guiding action.
   2. Review with examples.

III. When we know what we know.

A. If we have science-based findings on risk factors and we are confident of these findings, we can design programs and implement them to reduce risk and thus prevent disease outcomes.
B. Example before this commission: Arsenic on ground water and bladder cancer.
   1. We know that arsenic is present in NH groundwater and that organic arsenic is associated with elevated risk of bladder cancer.
C. Thus, given that we know what we know our programs for environmental risk reduction must include
   1. Surveys of wells to assess the presence of arsenic.
   2. Recommendation for amelioration of arsenic in wells which are found to contain above-allowable levels of arsenic.
   3. Public awareness campaigns to alert users of well-water to the and to recommend testing.
   4. Systems for water testing which are
      a. affordable
      b. accessible
   5. Systems may be offered by the state or private testers
      a. This may require
         i. State subsidy
         ii. Legislation to guarantee that wells are tested periodically
            A. At the time of a home sale
            B. Periodically
D. This is how we create a system when we know what we know.
   1. We can do!
      a. But that is expensive and intensive and we are not structured to do it. And we will annoy!
   2. We can legislate to demand that others do it!
      a. Mandate arsenic evaluation for every real estate transaction.
         i. This is not hard to do, but it will annoy.
   3. We can recommend that it be done, e.g. home inspections.
      a. This is not always effective.

IV. A more recent example: Do we know what we know?

A. Perfluorides in water — PFOAs and PFOSs
B. Until recently, we knew that water throughout the state had traces of PFOAs and PFOSs. That we knew.
C. What we did not know at the time was what the health outcomes were.
    1. Dr. Ben Chan, state epidemiologist, testified before our Committee on Health, Human Services and Aging, that we ought not to act on PFOAs and PFOSs for several reasons:
        a. This would be a costly endeavor
        b. We did not know what the health outcomes were or were not
        c. We knew that we did not know
D. That seems to have changed.
    1. Over the summer I was privileged to observe two scientific papers
        a. International conference at Northeastern University
        b. Paper presentation at Georgetown University
    2. These papers relied on a meta-analysis of multiple studies and were able to document the health outcomes of exposure to PFOAs and PFOSs.
    3. These ground-breaking papers moved us from 'what we know that we don't know' toward 'what we know that we now know'. These papers were written by Mindi Messmer!
E. If we now return to our arsenic experience, we must consider whether we must create programs for environmental risk reduction to include :
    1. Surveys of wells to assess the presence of PFOAs and PFOSs.

Senator Sherman asked if the paradigm shifts if the environmental risk is created by polluters. Arsenic is natural to the granite state; but PFAS was introduced by companies.

    2. Recommendation for amelioration of chemical in wells which are found to contain above-allowable levels.
    3. Public awareness campaigns to alert users of well-water and to recommend testing.
    4. Systems for water testing which are
        a. affordable
        b. accessible
    5. Systems may be offered by the state or private testers
        a. This may require
            i. State subsidy
            ii. Legislation to guarantee that wells are tested periodically
                A. At the time of a home sale
                B. Periodically

Mindi Messmer reminded the commission that legislation around mandatory testing has been tried and defeated. Mindi Messmer highlighted the example of property owners in Greenland that did not know about super fund site.

F. We create a system when we know what we know.

G. If we now know what we did not know, what is our responsibility in places such as Merrimack?

V. We must now consider how we must act when we know that we don't know.

A. If there is a potential risk factor, but we don't know the health outcomes, what shall we do? "I know what I don't know"
Lots of examples:
    a. Legalizing marijuana, vaping
    a. Microwave radiation
        i. From cell phone use, from towers
        ii. Swimming in a sea of microwave radiation
    b. Fluoridation of water
    c. Glyphosphates
    d. Agricultural pesticides
    e. Prescription drugs (e.g. thalidomide)
    f. Effect of immunization using mercury-based preservatives

Senator Sherman commented that the immunization research was bad research. The researcher has lost his license. The research resulted in deaths of children that cannot be vaccinated. We are the only states in the nation that does not have an immunization registry which is a critical tool in the event of an outbreak.

Comment from Jonathan Alli: Emerging evidence that PFAS may be associated with antibody responses which may affect efficacy of immunizations (ongoing study with silent spring)

B. The fact is that new technologies — even old ones — may have health outcomes which we do not know.
    1. Some may suspect — but we do not know.
    2. A troubling example: Biliary carcinomas in Exeter [Dr. Sherman]
        a. Shall we act and if so, how?
        b. Examine data? Conduct research?
        c. Our DHHS is not funded nor resourced to do research.

Senator Sherman shared his experience from a meeting of staff at Exeter Hospital and oncologists from Boston… their comment was that it is striking how much cholangiocarcinoma and pancreatic cancer are seen in Exeter.

But when Dr Sherman asked DHHS to do the analysis of cancer cases… there was not a statistically significant difference between this area and the state rate.
Mindi Messmer asked if the local rate was compared to national or other regional rates.

Dr Bush shared the DHHS cancer protocol which indicates that local cancer rates are compared to regional rates, state age-adjusted rates, and national age-adjusted rates.

This type of investigation could be done by State; Tom Sherman has included resources in previous pieces of legislation. Those bills died, but there is legislation for a State Health Improvement Plan.

Surveillance of list of conditions of NIEHS currently

C. What is our responsibility and what is our plan of action?
    1. Persistent review of scientific literature.
    2. Having information readily available for the public — i.e, we don't know.
    3. Creating a watch-list. Journal scans. Is this enough?
    4. Continuous presence at CDC, including cost of travel.

VI. Then there are the things we don't know we don't know.

A. Why don't we know?
    1. Sometimes there are actors who don't want us to know.
        a. Bottled water?
    2. Sometimes things are unknowable.
        a. Very difficult to assess time duration of exposures, quantity of exposure, outcomes, when outcomes can be quite diverse, e.g. neoplastic disease.
B. Can we create and maintain oversight for every possible exposure?

VII. What shall we recommend?

A. Intervention when we know what we know.
B. Surveillance when we know that we don't know.
    Surveillance is looking at our own data and surveying for hot spots
C. Vigilance when don't know what we don't know.
    Vigilance includes reviewing literature and learning at professional conferences

Mindi Messmer asked if vigilance includes precautionary principle. Rep Salloway defined precautionary protections as… before we have all of the data, when we have enough data to know that we know we should be protecting.

Rep Nelsen asked about how often houses are bought/sold with appropriate testing of wells; Rep Salloway suggested that this would be great research project.

Mike Wimsatt provided an update that the drinking water quality study is almost done. 540 wells distributed statewide… large panel of pesticides, manganese, etc. In tandem, DPHS testing urine and blood (TRACE study 200 households, 2/3 on private wells); many homes/wells can be matched survey results to well results. Senator Sherman requested that Mike Wimsatt bring those results to this Commission.

D. Agility when our paradigm shifts from don't know to know.

4) Discussion of the future direction of the Commission: Senator Sherman

Senator Sherman suggested that the Commission review charge of the commission. Excerpt from the legislation below (notes about Commission meeting discussion in italics):

The commission's study shall include, but not be limited to:

(1) Determining which entities may report confirmed cases of chronic conditions or other health-related impacts to the public health oversight program.

In SB 511 commission, we learned what data sources are available and what outcomes are of interest… is there a mechanism for entities to report. There are some conditions that are "reportable" but there could be recommendations to make additional conditions reportable.

Discussion around feasibility of "any" entity reporting confirmed cases of additional chronic conditions or other health-related impacts to DPHS. There are thousands of chronic conditions, which ones would be reportable.

Audacious goal: all conditions reported by all providers to DPHS in real time.

There is a list of reportable conditions.

EPHT tracks 12 measures. There could be more, and should DPHS add to this list, and this Commission could recommend resources.
APCD could be used in conjunction with Corrections and hospital data to detect

Many municipalities have local health officers for reporting other health findings. Some diseases are "reportable" and are required to be reported to DPHS.

DPHS Chronic Disease Surveillance program is the entity reporting about public health.

Senator Sherman suggested that Mindi, Katie and Amy will work on concept for Commission that ties together surveillance, vigilance… data sources, etc. This charge and the resulting concept paper are also related to #4, 5, 6, 7, 8, 9, 10, 11 and… there is material from SB 511 that relates to this.

(2) Recommending ways to alert public health officials regarding higher than expected rates of chronic disease or other health-related impacts which may be related to exposures of unrecognized environmental contaminants.

(3) Recommending a method to inform citizens regarding programs designed to manage chronic disease or other environmental exposure health-related impacts.

(4) Recommending data sources and a method to include data compiled by a public or private entity to the greatest extent possible in the development of the public health oversight program.

(5) Defining by codes, the health status indicators to be monitored, including chronic conditions, medical conditions, and poor health outcomes.

(6) Studying current health databases, including years available, potential for small area analysis, and privacy concerns.

(7) Researching currently existing health data reports by agency, bureau, or organization.

(8) Creating a model of desired data outputs and reports for chronic conditions and other health-related impacts.

(9) Identifying the gaps between what currently exists and the model output.

(10) Recommending the organizational structure responsible for the oversight function and mandatory reporting requirements.

(11) Reviewing results of stages 1, 2 and 3 of the pilot study recommended by the previous commission established by 2017, 166 and identifying changes to subparagraphs (8), and further identify items in (9) and (10).

(12) Identifying technology system changes necessary to carry out the charge of the commission.

(13) Collaborating with the National Institutes of Health, the United States Environmental Protection Agency, and the Centers for Disease Control and Prevention to develop protocols for the department of health and human services to educate and provide guidelines for physicians and other advanced health care practitioners to identify and evaluate appropriate diagnostic screening tests to assess health effects from exposure to emerging contaminants.

(14) Collaborating with the National Institutes of Health, the United States Environmental Protection Agency, and the Centers for Disease Control and Prevention to develop protocols for programs to streamline education and outreach to health care providers about how to implement the guidelines specified in subparagraph. The protocols shall include education relative to methods to reduce further exposures and to eliminate the contaminants, if effective methods are available.

(15) Recommending legislation, as necessary, to carry out the charge of the commission.

(a) The commission shall solicit information from any person or entity the commission deems relevant to its study.

(b) The commission may, with input from a state agency or agencies, decide whether additional appropriations are necessary to complete the work of the commission. The commission may recommend additional appropriations for approval by the general court.

5) Next meeting: March 27 at 10am NH DES Room A

6) Adjourned at 12:02.