1. Welcome and Introductions

2. Presentation by Dr. Masahiko Kobayashi, City and County of Honolulu Medical Examiner, on medical or autopsy data relating to alcohol and substance use
   a. Honolulu Medical Examiner’s office
      i. Catching drug overdose deaths: classification, reporting
         1. Some cases misreported, but can be caught if physician labels “unnatural deaths”
         2. Total 1,768 per 100,000 drug deaths between 2007-19
         3. During this period, see increasing reported deaths, jurisdictional cases
            a. Increase may be partially due to increased awareness of doctors to report
         4. 192 cases in 2019 - 173 accident, most from methamphetamine
      ii. How to order toxicology testing
         1. Alcohol testing
         2. Urine drug screen - no confirmation (presumptive possible), and cannot detect Fentanyl
         3. NMS labs - large lab on the mainland
            a. Basic test: major drugs (including fentanyl)
            b. Expanded test: includes prescription and OTC drugs
         4. Test ordered depends on the cost and scenario
            a. e.g. drug overdose for meth, heroine, etc.
      5. Common Cases in HNL
         a. Ages 40-60, male: found unresponsive or shortness of breath
            i. Often history of methamphetamine use or heart disease
            ii. Basic toxicology tests to test for methamphetamine in blood - counted as accident
1. If negative toxicology, called natural death
   iii. Rare drugs found here: fentanyl - fewer than the mainland

b. Prescription opioid overdose
   i. Not always specified on death certificates
   ii. Distinguish between heroin and prescription morphine overdose
      1. When morphine found in the blood, could be from heroin or codeine
         a. Heroin has short half life, so rare to see by time of autopsy
      2. Chronic users may develop tolerance, so levels between different patients may have different meanings
      3. Drug may move around the body after death - may make drug levels unreliable
      4. Review Medical records and exclude natural deaths
      5. Confiscate pill bodies at scene and request medical records
         a. Still may not know how medications were obtained
      6. “Prescription Opioids” - prescribed by a dr but may have been purchased on the street

iii. Prescription Opioid Deaths
   1. More female than other drug deaths (~\(\frac{1}{3}\))
   2. Prescription opioid deaths have been going down, even as overall drug related deaths are increasing
      a. Morphine and methamphetamine decreased
      b. Hydrocodone and oxycodone increased then decreased
      c. Fentanyl increased substantially in 2019
   3. Higher rates of indeterminate and suicide deaths in opioid specific deaths

c. Questions:
   i. To clarify: "drug-related" means that drugs were present in the system at death, or means drugs were the cause of death (e.g. overdose) ?
      1. Drug was cause of death - overdose
   ii. The fentanyl deaths, are they clustered in any particular geolocation?
      1. No statistics here
   iii. So the mechanism of death from opiates is acute respiratory failure, but the mechanism of death from stimulants may be from a combination of more chronic cardiovascular deterioration (other than cerebral hemorrhage ?)
      1. Often see a combination of methamphetamine and heroin or fentanyl, cannot tell which was the cause of death.
      2. Stimulants can cause acute arrhythmia without chronic effects to the cardiovascular system. When young people use cocaine and suddenly die, we may not find any pathologic changes in the heart.
   iv. For the drug deaths, what was the total number of meth deaths vs. all other drugs combined?
      1. Meth more than other deaths
   v. Since we are in a high intensity drug area, why don't we have a more detailed drug testing lab?
      1. He can’t answer
vi. You mentioned that many drug tests are conducted on the mainland by NMS Labs. How sensitive are these drug tests to sample degradation from transport?
   1. Concerned mostly for cocaine because it can be broken down, but other drugs he does not know. Blood from hospital never finds cocaine, but autopsy with preservatives can find cocaine.

vii. Do Fentanyl deaths in Hawai'i seem tied to a "bad batch" of heroin hitting the streets, like we see in many places in the continental USA?
   1. Doesn’t know

viii. Any increase in buprenorphine overdoses or increases here?
   1. No significant increase here

ix. This does not take into account chronic health issues as a result of drug use, so our death rates due to drug use is actually more than reported? (i.e. heart problems from meth use)
   1. For example, alcohol use can cause health problems, but if not high levels detected in blood, then call it natural death. Even if caused liver disease from heavy drinking, then still considered natural death.

x. Is data available by ethnicity?
   1. Don’t have this as of now

xi. Is your data collection via hard copy files or electronic as you mentioned you had to look through the files?
   1. All electronic.

3. Presentation by Haley Hsieh, Executive Director, Laulima Data Alliance, on the Laulima Data Alliance and data relating to alcohol and substance use
   a. Background
      i. 501(c)(3) established in 2/2017 to create data arm in Healthcare Association of Hawaii
         1. HHIC was previous
      ii. Support the hospital leaders in decision making to improve quality and healthcare services
      iii. Partners with Iowa Hospital Association
         1. 20+ years collecting data and cloud based inpatient outpatient data reporting program
         2. Has partnerships with 12 state hospitals
   b. Data Flow
      i. Participating hospitals (some new from previous program - in discussions with Tripler and Hawaii State Hospital)
      ii. Data Collection Program, - discharge, outpatient, demographic
         1. Allows for finding in and out patient services demanded in the state
         2. Build business plans with this or make initiatives
      iii. Removal identifiable information (no PHI) and aggregate it into various reporting tools
         1. Dashboards and reports
            a. Readmission reports, diagnosis codes, etc.
         2. Data all comes from hospital, not claims like other systems
            a. Claims are only what is reimbursable
            b. This allows view of all services performed
c. Benefits of shared data repository
   i. Quick access and user friendly
   ii. Market demand- serving needs of surrounding zip codes
   iii. Non-hospital data tools - some from ACS
   iv. Data transparency - if seeing an unusual trend, can compare to other hospitals or statewide

d. Dashboards
   i. Hospitals have 16 to access
   ii. Hospital compare - see everything that goes to medicare
   iii. Opioid overdose dashboard
   iv. Some Historical data (2016-present)
      1. Data lag is about 90 days
      2. For COVID, will have data by end of the year (for right now)
   v. Dashboard:
      1. Example of use: For state, what was the number of inpatient substrate abuse cases admitted, compare q1 2020 to q1 2019?
         a. Color based maps (toggle to change for color blind users)
            i. green = increase, red= decrease, more saturated= stronger change
            ii. Show where residents live for inpatient substance abuse
            iii. More cases in Hilo and Kailua, less in Waianae and Kona
            iv. Top shows quick stats
         b. By hospital: Majority cases go to Queens (decreasing), then Castle (increasing)
         c. Coverage plan: HMSA Quest
         d. Age categories
      2. Example: On Oahu, what was the change in the number of inpatient substance abuse cases admitted to oahu hospitals q1 2020 to q1 2019?
         a. Map: See more in Kailua, less in Waianae
         b. Same hospital, coverage, age data
      3. Example: What about looking just at Kailua? Can click on it on the map in previous dashboard
         a. Can see trend back to 2016
         b. See hospital, plan coverage, and age breakdown
      4. Example: Look at only QUEST integration patients?
         a. Click the quest plans and will show their profile: hospital and age profiles
   vi. Slice and Dice tool
      1. Example: substance abuse trends
      2. Break down by race ethnicity, residential origin, discharge status (where they go - mostly home), age bands, hospitals
   vii. Philosophy is to make understandable and actionable format to drive decision making, this impacts behavior, which impacts results (circular)
      1. Only hospitals for now, reaching out to nursing and hospice care too
      2. Want acute, post-acute, home involved too - any touch point for data
   viii. Only hospitals currently have access to the data, and gave DOH access recently for appropriate access
e. Questions:
   i. Is laulima data alliance noting any aberrations in data that correlate with increases in Covid cases?
      1. Yes, that is the plan. Have codes set. Want to look before and after. Mainland data says some decrease in cardiac and stroke. Want to create COVID report, down to bed level to create profile
   ii. What social determinants of health are collected and reported?
      1. Depends on census data - usually in December
      2. One zip code had aging population, so decrease in child bearing age for females, so can confirm don’t need to add OB, but rather add geriatric services
   iii. Is this data for where they reside or where accessed inpatient services or where they reside? People may live in one zip code (i.e., Kailua) but access services in Honolulu (i.e., 96817)
      1. Where the patient lives, can see if go to other area
   iv. Are some leaving against medical advice due to CPS/CWS involvement?
      1. Don’t know why, just that they did
   v. Are these numbers for SU based on primary only or also includes non-primary diagnoses?
      1. Captures all diagnosis codes, primary and secondary. Tracked with homelessness - not primary code, but do catch that
   vi. Is it possible to look at hospitals and see what the major services each offers or has demand for? Is there much specialization between the major hospitals?
      1. Dashboard for which hospital leads in various services - where patients go for specific services. Hospitals are now very open to transparency. Previous service only showed their own hospital and gave others labels. Some concerns for market share impacts, but decided it's good to know what’s truly going on, then compete with their business plans.
   vii. Is there a cost for obtaining and accessing data for research?
      1. Yes. Researchers may ask for data, reviewed by a privacy board, then determine security of data - charge fee.
      2. To elaborate, if you are a DOH researcher and have a need to use this data for DOH purposes, we have it licensed
   viii. How much work is done in house at Laulima vs at Iowa?
      1. Most done at Laulima - 2 staff. Iowa is 3rd staff, mostly ensuring a smooth process for upload and reporting. Can say what dashboards other hospitals like. Most other states are mandated to send data to DOH, but here there is no ceiling - can send more data than mandated.
   ix. So only members have access to this data?
      1. Yes, hospitals and DOH. HMSA has some access to skinned down dashboards

4. Update on the data analytic products for the ADAD State Plan on Substance Use Treatment by Dr. Deveraux Talagi
   a. State Plan on Substance Use 2021
      i. Funded by ADAD to answer
         1. How many require treatment for SUB?
2. What fraction are not receiving treatment?
   ii. Last update was 2004
   iii. Data Driven System of Care and special topics and populations
b. Data Analytics Framework
   i. Discovery: Substance use database inventory (SUDI)
      1. 39 data sources
      2. Data requests
      3. Analytic plan:
         4. Tables they want to fill and get data for
   ii. Cleaning
      1. Quality assessment
   iii. Analysis- create tables
      1. Transformation
      2. Formatting
   iv. Communication
      1. Shareable data in CSV files, PDF reports, web dashboards, infographics
         a. Dashboards in progress - prototype
c. Dashboard Prototypes:
   i. All graphs interactive and made to incorporate new data easily
   ii. Dashboards:
      1. Main gives overview and data bytes
      2. Mental Health
      3. Substance abuse
         a. Only data from national survey for drug use and health - use, abuse, tendency
         b. Working on treatment data
         c. Look at specific indicators
   iii. Can see full sets of tables and charts used for the reports - available for download
d. Plan for year 1
   i. Stats reports for deliverables
e. Plan for year 2:
   i. Dashboards, meetings, working on county level estimates for substance use treatments (within next few months)
   ii. State Plan and SEOW work collectively on 5 data sets - historical versions of Laulima data
f. Questions:
   i. Are the infographics ready for sharing on social media platforms (i.e., Instagram, Facebook, Twitter, etc.)?
      1. Prototype, not for wide distribution at this point
   ii. Is there a breakdown with those who are involved in the criminal justice system?
      1. Working on getting access to this with the OD2A team. Data on dashboard is not broken down with that

5. Next SEOW Meeting:
a. Friday, November 13, 2020 1:00-3:00pm via Zoom
   i. Dr Alvin Bronstein from DOH
   ii. Sean Okamoto from TASI