

Public Health PBRN Monthly Virtual Meeting August 21, 2014

Research-in-Progress Presentation by
Colorado Public Health Practice-Based Research Network

Please remember to mute your telephone/computer speakers during the presentation

*To mute your telephone press *6, to unmute #6*

Conference Phone: 877-394-0659

Conference Code: 7754838037#



at the University of Kentucky College of Public Health



Other Meeting Agenda Items

PBRN Research Updates

- Thank you for successful Grantee Meeting
- MPROVE/DACS panel APHA, Tuesday, November 18 10:30am-12:00pm
- DIRECTIVE projects to begin next month
- AcademyHealth Scholarship recipients teach-back
 - Gregory Tung
 - Eli Kern
 - Hilary Karasz
 - Collen Bridger
 - Beth Gyllstrom
 - Rebekah Pratt

Public Health Services Measurement

Adam Atherly
Sarah Lampe

Agenda

- ▶ Background
- ▶ Measurement
 - ▶ Analysis
 - ▶ Results
- ▶ Validity and Reliability
- ▶ Discussion



The Public Health Act of 2008

- ▶ Standardized legal structure of local public health
- ▶ Minimum qualifications of local PH directors
- ▶ Required CHAs and CHIPs
- ▶ Promulgation of Core Services



Core Services

- ▶ **Core Services Promulgated into Rule October 2011:**
 - ▶ Assessment, Planning, and Communication
 - ▶ Vital Records and Statistics
 - ▶ Communicable Disease Prevention, Investigation, and Control
 - ▶ Prevention and Population Health Promotion
 - ▶ Emergency Preparedness and Response
 - ▶ Environmental Health
 - ▶ Administration and Governance

...performed in accordance with the 10 Essential Public Health Services





Measurement

NACCHO Profile 2010

	Performed by LHD directly	Contracted out by LHD	Performed NEITHER by LHD directly NOR contracted out by LHD
Injury	c6q87a	c6q87b	c6q87h
Unintended pregnancy	c6q88a	c6q88b	c6q88h
Chronic disease programs	c6q89a	c6q89b	c6q89h
Nutrition	c6q90a	c6q90b	c6q90h
Physical activity	c6q91a	c6q91b	c6q91h
Violence	c6q92a	c6q92b	c6q92h
Tobacco	c6q93a	c6q93b	c6q93h
Substance abuse	c6q94a	c6q94b	c6q94h
Mental illness	c6q95a	c6q95b	c6q95h

Baseline Review Tool

*Note: Direct Services in these areas are located within the Direct Services & Other Tab.



Chronic diseases, conditions and related risk factors prevention and education*										
Tobacco Prevention										Please name here
Nutrition Promotion										Please name here
Physical Activity										Please name here
Obesity Prevention										Please name here
Worksite wellness										Please name here
Substance Abuse										Please name here
Mental health										Please name here
Automated External Difibrillator (AED)										Please name here
Cardiopulmonary Resuscitation (CPR)										Please name here
Other (please name)										Please name 'other' here



Chronic Disease Prevention and Education

What services are delivered within Chronic Disease Prevention and Education and by whom within your jurisdiction?

Tobacco (Check all that apply)

	LPHA	Someone else (name in notes)	Not Done	Notes
Development and/or dissemination of Educational Materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Development and/or dissemination of Educational Media (e.g. radio or television campaigns, mass media social marketing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Development and/or dissemination of Cultural/ linguistic tailored materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Implementation of culturally/linguistically tailored educational programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Implementation of educational and/or training programs and/or groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Implementation of Community Development Activities (e.g. coalitions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Policy Development and Implementation Initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here

Nutrition (Check all that apply)

	LPHA	Someone else (name in notes)	Not Done	Notes
Development and/or dissemination of Educational Materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Development and/or dissemination of Educational Media (e.g. radio or television campaigns, mass media social marketing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Development and/or dissemination of Cultural/ linguistic tailored materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Implementation of culturally/linguistically tailored educational programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Implementation of educational and/or training programs and/or groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Implementation of Community Development Activities (e.g. coalitions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here
Policy Development and Implementation Initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Please place any notes here

Determining best measures for post collection (From 1,882 total to 360)

Prevention and Population Health Promotion (from 275 to 81)

Environ Health (from 843 to 152)

Commun. Disease (from 206 to 75)

Assess. and Planning (from 150 to 4)

EPR (from 50 to 4)

Vital Records (from 8 to 4)

Direct Services (from 300 to 15)

Admin and Govern. (from 50 to 25)



Analysis

Chronic Disease Prevention and Education

What services are delivered within Chronic Disease Prevention and Education and by whom within your jurisdiction?

Tobacco (Check all that apply)

	LPHA	Someone else (name in notes)	Not Done	Notes
Development and/or dissemination of Educational Materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>
Development and/or dissemination of Educational Media (e.g. radio or television campaigns, mass media social marketing)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>
Development and/or dissemination of Cultural/ linguistic tailored materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>
Implementation of culturally/linguistically tailored educational programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>
Implementation of educational and/or training programs and/or groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>
Implementation of Community Development Activities (e.g. coalitions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>
Policy Development and Implementation Initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Please place any notes here</i>

Core Service	Program area	Service area	Activities
Prevention and Population Health Promotion	Chronic Disease	Tobacco	<ul style="list-style-type: none"> • Educational Materials • Educational Media • Culturally/Linguistically Tailored Educational Materials • Educational Programs • Culturally/Linguistically Tailored Educational Programs • Community Development • Policy Development
		Nutrition	
		Physical Activity	
		Mental Health	
	Maternal and Child Health	Prenatal Health Education	
		Unintended Pregnancy Prevention	
		Oral Health	
	Injury Prevention and Education	Motor Vehicle	

	Potential Range of Activities	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Outcome						
Core Service: Communicable Disease	0-34	50	26.44 (4.45)	28.06 (4.54)	1.62	t = 2.27, p = 0.03
Program Area: Immunizations	0-10	50	8.58 (1.74)	9.02 (1.42)	0.44	t = 1.95, p = 0.06
Service Area: Childhood Immunizations	0-5	50	4.54 (0.79)	4.70 (0.61)	0.16	t = 1.38, p = 0.17
Service Area: Adult Immunizations	0-5	50	4.04 (1.16)	4.32 (0.96)	0.28	t = 1.79, p = 0.08
Program Area: Prevention of Disease Transmission	0-10	50	9.14 (1.53)	9.08 (1.81)	-0.06	t = 0.17, p = 0.87
Service Area: Tuberculosis	0-5	50	4.86 (0.45)	5.00 (0.0)	0.14	t = 2.19, p = 0.03
Service Area: HIV	0-5	50	4.28 (1.34)	4.08 (1.81)	-0.20	t = 0.59, p = 0.56
Program Area: Population Prevention and Education	0-14	50	8.72 (3.16)	9.96 (3.05)	1.24	t = 2.45, p = 0.02
Service Area: Influenza	0-7	50	4.78 (1.59)	5.64 (1.48)	0.86	t= 2.94, p = 0.005
Service Area: STI	0-7	50	3.94 (1.95)	4.32 (2.33)	0.38	t = 1.09, p = 0.28
Core Service: Prevention and Health Promotion	0-56	50	34.72 (13.19)	37.14 (11.66)	2.42	t = 1.33, p = 0.19
Program Area: Chronic Disease	0-28	50	17.98 (7.16)	20.26 (6.24)	2.28	t = 2.16, p = 0.04
Service Area: Tobacco	0-7	50	4.30 (2.37)	4.66 (2.17)	0.36	t=1.02, p = 0.31
Service Area: Physical Activity	0-7	50	4.20 (2.35)	4.70 (2.33)	0.50	t=1.23, p = 0.23
Service Area: Mental Health	0-7	50	4.58 (2.28)	5.28 (2.29)	0.70	t=1.73, p = 0.09
Service Area: Nutrition	0-7	50	4.90 (2.01)	5.62 (1.65)	0.72	t = 2.66, p = 0.01
Program Area: Maternal & Child Health	0-21	50	12.76 (5.71)	12.90 (5.61)	0.14	t = 0.14, p = 0.89
Service Area: Prenatal Health	0-7	50	4.38 (2.23)	4.64 (2.24)	0.26	t= 0.63, p = 0.53
Service Area: Unintended Pregnancy Prevention	0-7	50	3.82 (2.44)	4.06 (2.51)	0.24	t = 0.57, p = 0.57
Service Area: Oral Health	0-7	50	4.56 (2.19)	4.20 (2.39)	-0.36	t = 0.88, p = 0.38
Program Area: Injury Prevention	0-7	50	3.30 (2.57)	3.98 (2.68)	0.68	t = 1.32, p = 0.19
Service Area: Motor Vehicle						
Core Service: Environmental Health	0-15	46	11.26 (3.57)	12.09 (2.83)	0.83	t = 1.95, p = 0.06
Program Area: Sanitation	0-9	46	5.98 (2.53)	6.59 (2.28)	0.61	t = 1.76, p = 0.08
Service Area: Childcare Facilities	0-3	46	2.72 (0.66)	2.72 (0.50)	0.00	t=0.00, p = 1.00
Service Area: Summer Camps	0-3	46	1.65 (1.35)	2.13 (1.28)	0.48	t=2.57, p = 0.01
Service Area: Spa, Swimming, Natural Bathing	0-3	46	1.61 (1.18)	1.74 (1.25)	0.13	t=0.68, p = 0.50
Program Area: Food Safety	0-6	46	5.28 (1.39)	5.50 (1.01)	0.22	t = 1.46, p = 0.15
Service Area: Retail Establishments	0-3	46	2.87 (0.34)	2.96 (0.21)	0.09	t= 1.43, p = 0.16
Service Area: Special Events	0-3	46	2.41 (1.20)	2.54 (0.89)	0.13	t = 1.00, p = 0.32

Outcome	Potential Range of Activities	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Communicable Disease	0-34	50	26.44 (4.45)	28.06 (4.54)	1.62	t = 2.27, p = 0.03
Program Area: Immunizations	0-10	50	8.58 (1.74)	9.02 (1.42)	0.44	t = 1.95, p = 0.06
Service Area: Childhood Immunizations	0-5	50	4.54 (0.79)	4.70 (0.61)	0.16	t = 1.38, p = 0.17
Service Area: Adult Immunizations	0-5	50	4.04 (1.16)	4.32 (0.96)	0.28	t = 1.79, p = 0.08
Program Area: Prevention of Disease Transmission	0-10	50	9.14 (1.53)	9.08 (1.81)	-0.06	t = 0.17, p = 0.87
Service Area: Tuberculosis	0-5	50	4.86 (0.45)	5.00 (0.0)	0.14	t = 2.19, p = 0.03
Service Area: HIV	0-5	50	4.28 (1.34)	4.08 (1.81)	-0.20	t = 0.59, p = 0.56
Program Area: Population Prevention and Education	0-14	50	8.72 (3.16)	9.96 (3.05)	1.24	t = 2.45, p = 0.02
Service Area: Influenza	0-7	50	4.78 (1.59)	5.64 (1.48)	0.86	t = 2.94, p = 0.005
Service Area: STI	0-7	50	3.94 (1.95)	4.32 (2.33)	0.38	t = 1.09, p = 0.28

Outcome	Potential Range of Activities	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Prevention and Health Promotion	0-56	50	34.72 (13.19)	37.14 (11.66)	2.42	t = 1.33, p = 0.19
Program Area: Chronic Disease	0-28	50	17.98 (7.16)	20.26 (6.24)	2.28	t = 2.16, p = 0.04
Service Area: Tobacco	0-7	50	4.30 (2.37)	4.66 (2.17)	0.36	t=1.02, p = 0.31
Service Area: Physical Activity	0-7	50	4.20 (2.35)	4.70 (2.33)	0.50	t=1.23, p = 0.23
Service Area: Mental Health	0-7	50	4.58 (2.28)	5.28 (2.29)	0.70	t=1.73, p = 0.09
Service Area: Nutrition	0-7	50	4.90 (2.01)	5.62 (1.65)	0.72	t = 2.66, p = 0.01
Program Area: Maternal & Child Health	0-21	50	12.76 (5.71)	12.90 (5.61)	0.14	t = 0.14, p = 0.89
Service Area: Prenatal Health	0-7	50	4.38 (2.23)	4.64 (2.24)	0.26	t= 0.63, p = 0.53
Service Area: Unintended Pregnancy Prevention	0-7	50	3.82 (2.44)	4.06 (2.51)	0.24	t = 0.57, p = 0.57
Service Area: Oral Health	0-7	50	4.56 (2.19)	4.20 (2.39)	-0.36	t = 0.88, p = 0.38
Program Area: Injury Prevention Service Area: Motor Vehicle	0-7	50	3.30 (2.57)	3.98 (2.68)	0.68	t = 1.32, p = 0.19

Outcome	Potential Range of Activities	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Environmental Health	0-15	46	11.26 (3.57)	12.09 (2.83)	0.83	t = 1.95, p = 0.06
Program Area: Sanitation	0-9	46	5.98 (2.53)	6.59 (2.28)	0.61	t = 1.76, p = 0.08
Service Area: Childcare Facilities	0-3	46	2.72 (0.66)	2.72 (0.50)	0.00	t=0.00, p = 1.00
Service Area: Summer Camps	0-3	46	1.65 (1.35)	2.13 (1.28)	0.48	t=2.57, p = 0.01
Service Area: Spa, Swimming, Natural Bathing	0-3	46	1.61 (1.18)	1.74 (1.25)	0.13	t=0.68, p = 0.50
Program Area: Food Safety	0-6	46	5.28 (1.39)	5.50 (1.01)	0.22	t = 1.46, p = 0.15
Service Area: Retail Establishments	0-3	46	2.87 (0.34)	2.96 (0.21)	0.09	t= 1.43, p = 0.16
Service Area: Special Events	0-3	46	2.41 (1.20)	2.54 (0.89)	0.13	t = 1.00, p = 0.32

Core Service	Program area	Service area	Activities
Prevention and Population Health Promotion	Chronic Disease	Tobacco	<ul style="list-style-type: none"> • Educational Materials • Educational Media • Culturally/Linguistically Tailored Educational Materials • Educational Programs • Culturally/Linguistically Tailored Educational Programs • Community Development • Policy Development
		Nutrition	
		Physical Activity	
		Mental Health	
	Maternal and Child Health	Prenatal Health Education	
		Unintended Pregnancy Prevention	
		Oral Health	
	Injury Prevention and Education	Motor Vehicle	

Outcome	Potential Range of Service Areas	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Communicable Disease	0-34	50	26.44 (4.45)	28.06 (4.54)	1.62	t = 2.27, p = 0.03
Activity: System Based Services*	0-10	50	6.96 (1.80)	7.78 (1.73)	0.82	t = 2.66, p = 0.01
Activity: Population Based Services†	0-8	50	7.10 (0.93)	7.36 (0.92)	0.26	t = 1.57, p = 0.12
Activity: Targeted Population Services‡	0-12	50	8.74 (2.35)	9.34 (2.34)	0.60	t = 1.84, p = 0.07
Activity: Effected Population Services§	0-4	50	3.64 (0.83)	3.58 (0.78)	-0.06	t = 0.35, p = 0.73
Core Service: Prevention and Health Promotion	0-56	50	34.72 (13.19)	37.14 (11.66)	2.42	t = 1.33, p = 0.19
Activity: Development and/or Dissemination of Educational Materials	0-8	50	7.22 (1.07)	7.10 (1.18)	-0.12	t = 0.57, p = 0.57
Activity: Development and/or Dissemination of Educational Media	0-8	50	5.00 (2.67)	4.82 (2.49)	-0.18	t = 0.41, p = 0.68
Activity: Development and/or Dissemination of Cultural/ Linguistic Tailored Materials	0-8	50	5.40 (2.60)	5.82 (2.26)	0.42	t = 0.98, p = 0.33
Activity: Implementation of Culturally/ Linguistically Tailored Educational Programs	0-8	50	3.62 (2.83)	4.70(2.39)	1.08	t = 2.46, p = 0.02
Activity: Implementation of Educational and/or Training Programs and/or Groups	0-8	50	5.28 (1.98)	5.56 (2.02)	0.28	t = 0.73, p = 0.47
Activity: Implementation of Community Development Activities	0-8	50	4.36 (2.60)	4.58 (2.40)	0.22	t = 0.55, p = 0.59
Activity: Policy Development and Implementation Initiatives	0-8	50	3.16 (2.74)	4.56 (2.30)	1.40	t = 3.42, p = 0.001
Core Service: Environmental Health	0-15	46	11.26 (3.57)	12.09 (2.83)	0.83	t = 1.95, p = 0.06
Activity: Inspections	0-5	46	3.83 (1.22)	3.96 (1.05)	0.13	t = 0.75, p = 0.46
Activity: Complaint Investigation/Response	0-5	46	4.04 (1.23)	4.02 (1.09)	-0.02	t = 0.14, p = 0.89
Activity: Outreach/Education	0-5	46	3.39 (1.47)	4.11 (1.08)	0.72	t = 3.76, p = 0.0005

*System Based Services include: Immunizations-Tracking, Follow-Up, and Checking Registries; Immunizations-Monitor Coverage Rates; Prevention of Disease Transmission-Surveillance; Population Prevention and Education-Community Development; Population Prevention and Education-Policy

†Population Based Services include: Immunizations-Outreach and Education; Prevention of Disease Transmission-Screening; Population Prevention and Education-Educational Materials; Population Prevention and Education-Educational Media

‡Targeted Population Services include: Immunizations-Provider Education; Immunizations-Immunization Registry Recruitment; Prevention of Disease Transmission-Case Investigation; Population Prevention and Education-Cultural materials; Population Prevention and Education-Cultural Programs; Population Prevention and Education-Educational/Training programs

§Effected Population Services include: Prevention of Disease Transmission-Contact notification and follow-up; Prevention of Disease Transmission-Treatment referral and follow-up

Outcome	Potential Range of Service Areas	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Communicable Disease	0-34	50	26.44 (4.45)	28.06 (4.54)	1.62	t = 2.27, p = 0.03
Activity: System Based Services*	0-10	50	6.96 (1.80)	7.78 (1.73)	0.82	t = 2.66, p = 0.01
Activity: Population Based Services†	0-8	50	7.10 (0.93)	7.36 (0.92)	0.26	t = 1.57, p = 0.12
Activity: Targeted Population Services‡	0-12	50	8.74 (2.35)	9.34 (2.34)	0.60	t = 1.84, p = 0.07
Activity: Effected Population Services§	0-4	50	3.64 (0.83)	3.58 (0.78)	-0.06	t = 0.35, p = 0.73

*System Based Services include: Immunizations-Tracking, Follow-Up, and Checking Registries; Immunizations-Monitor Coverage Rates; Prevention of Disease Transmission-Surveillance; Population Prevention and Education-Community Development; Population Prevention and Education-Policy

†Population Based Services include: Immunizations-Outreach and Education; Prevention of Disease Transmission-Screening; Population Prevention and Education-Educational Materials; Population Prevention and Education-Educational Media

‡Targeted Population Services include: Immunizations-Provider Education; Immunizations-Immunization Registry Recruitment; Prevention of Disease Transmission-Case Investigation; Population Prevention and Education-Cultural materials; Population Prevention and Education-Cultural Programs; Population Prevention and Education-Educational/Training programs

§Effected Population Services include: Prevention of Disease Transmission-Contact notification and follow-up; Prevention of Disease Transmission-Treatment referral and follow-up

Outcome\	Potential Range of Service Areas	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Prevention and Health Promotion	0-56	50	34.72 (13.19)	37.14 (11.66)	2.42	t = 1.33, p = 0.19
Activity: Development and/or Dissemination of Educational Materials	0-8	50	7.22 (1.07)	7.10 (1.18)	-0.12	t = 0.57, p = 0.57
Activity: Development and/or Dissemination of Educational Media	0-8	50	5.00 (2.67)	4.82 (2.49)	-0.18	t = 0.41, p = 0.68
Activity: Development and/or Dissemination of Cultural/Linguistic Tailored Materials	0-8	50	5.40 (2.60)	5.82 (2.26)	0.42	t = 0.98, p = 0.33
Activity: Implementation of Culturally/Linguistically Tailored Educational Programs	0-8	50	3.62 (2.83)	4.70(2.39)	1.08	t = 2.46, p = 0.02
Activity: Implementation of Educational and/or Training Programs and/or Groups	0-8	50	5.28 (1.98)	5.56 (2.02)	0.28	t = 0.73, p = 0.47
Activity: Implementation of Community Development Activities	0-8	50	4.36 (2.60)	4.58 (2.40)	0.22	t = 0.55, p = 0.59
Activity: Policy Development and Implementation Initiatives	0-8	50	3.16 (2.74)	4.56 (2.30)	1.40	t = 3.42, p = 0.001

Outcome	Potential Range of Service Areas	n	Pretest Mean (SD)	Posttest Mean (SD)	Change	Test Statistic
Core Service: Environmental Health	0-15	46	11.26 (3.57)	12.09 (2.83)	0.83	t = 1.95, p = 0.06
Activity: Inspections	0-5	46	3.83 (1.22)	3.96 (1.05)	0.13	t = 0.75, p = 0.46
Activity: Complaint Investigation/Response	0-5	46	4.04 (1.23)	4.02 (1.09)	-0.02	t = 0.14, p = 0.89
Activity: Outreach/Education	0-5	46	3.39 (1.47)	4.11 (1.08)	0.72	t = 3.76, p = 0.0005

Structural Factors

- ▶ Local board of health structure
- ▶ Structure of the agency prior to Act
- ▶ Agency leadership turnover
- ▶ Agency jurisdiction population size
- ▶ Percent of population living at, or below, poverty



Variable	Category	Number of LPHAs within Category
Pre-Act LPHA structure	Former Nursing Service	37
	Former Organized Health Department	13
Board of Health Structure	Independent Local Board of Health	17
	Elected Officials only on Local Board of Health	33
Executive Director Turnover	New LPHA Executive Director from 2011-2013	17
	Same LPHA Executive Director from 2011-2013	33
Population	Continuous	
Poverty	Continuous	

Dependent Variable: Change in Communicable Disease Services				
Variable	Coef.	Std. Err.	t statistic	P> t
Former Nursing Service	-4.145	3.0942	-1.34	0.187
Elected Board of Health	-5.119	2.6482	-1.93	0.060
Turnover	-3.821	1.4780	-2.59	0.013
Population (1,000's)	0.001	6.34E-06	1.28	0.207
Percent Poverty	0.078	0.1170	0.67	0.507
Constant	5.946	3.4449	1.73	0.091
Dependent Variable: Change in Population and Health Promotion Services				
Variable	Coef.	Std. Err.	t statistic	P> t
Former Nursing Service	13.905	8.5952	1.62	0.113
Elected Board of Health	9.463	7.3562	1.29	0.205
Turnover	-2.065	4.1055	-0.50	0.617
Population (1,000's)	0.002	0.0176	0.08	0.933
Percent Poverty	-0.094	0.3249	-0.29	0.774
Constant	-9.067	9.5694	-0.95	0.349
Dependent Variable: Change in Environmental Health Services				
Variable	Coef.	Std. Err	t statistic	P> t
Former Nursing Service	-0.039	1.8851	-0.02	0.983
Elected Board of Health	-2.235	1.6162	-1.38	0.174
Turnover	0.131	0.9779	0.13	0.894
Population (1,000's)	0.007	0.0039	1.82	0.077
Percent Poverty	0.054	0.0722	0.75	0.457
Constant	0.249	2.1113	0.12	0.907

Key Findings

- ▶ Even in a short time period (2 yrs) there was significant change
- ▶ Significant Increases were seen in "Population Health" Activities
- ▶ Significant increases but no significant decreases
- ▶ Changes were not dependent on LPHA size or governance
- ▶ Detailed data collection, though cumbersome, was necessary to observe significant changes



Reliability and Validity

Reliability and Validity Research Question:

Are the core service measures
reliable and valid?



Reliability:

If we asked the same question in the exact same way under the exact same circumstances, would we get the same answer?

Validity:

*Truthfulness: Does the test measure what it purports to measure? **The extent to which certain inferences can be made from test scores or other measurement.** (Mehrens and Lehman, 1987)*



Methods

Reliability: Test-retest

- ▶ Selected 19 Agencies
- ▶ Agency filled out selected measures 2-4 weeks after initial survey
- ▶ Selected measures across different domains

Validity: Construct Validity

- ▶ Located similar measures in NACCHO profile
- ▶ Correlated
 - ▶ Kappa



Example:

Core Services:

Q: Structure of Agency: Please select ONE of the following to describe your local public health agency:

A: Single County Agency

NACCHO Profile:

Q: Which of the following best describes your LHD's organizational structure?

A: My LHD is a free-standing public health agency.



Reliability Summary

Medians:

▶ Admin and Governance (6 measures):	1.00
▶ Assessment and Planning (11 meas.):	0.42
▶ EPR (8 measures):	0.72
▶ Immunizations (14 measures):	0.92
▶ CD Capacity (9 measures):	0.27
▶ CD Funding (5 measures):	1.00
▶ PHP Tobacco (19 measures):	0.55
▶ PHP Nutrition (18 measures):	0.51
▶ PHP Physical Activity (22 measures):	0.42
▶ PHP Pregnancy Prevention (23 measures):	0.60
▶ PHP Oral Health (22 measures):	0.72
▶ PHP Capacity (8 measures):	0.61



Validity Summary

- ▶ High concordance on measures about the LPHA itself
 - ▶ Funding
 - ▶ Services
 - ▶ Inspections
- ▶ Lower concordance on measures about what happens *elsewhere* in community
 - ▶ Not done
 - ▶ Done by someone else



Conclusions

- ▶ Reliability and validity high for measures asking about structure, funding, services provided by LPHA
- ▶ Reliability concerns about questions about capacity or projections
- ▶ Validity concerns about measures asking about services provided elsewhere in community



Presentation schedule

Presentation Schedule for 2014

January 16 Tennessee PBRN

February 20 Nebraska PBRN

March 20 North Carolina PRBN

May 15 New York PBRN

June 19 California PBRN

July 17 Connecticut PBRN

August 21 Colorado PBRN

September 18 Ohio PBRN

October 16 New Jersey PBRN

November 20 Washington PBRN

December 18 New Hampshire PBRN

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