



Community Health Improvement Partnership (CHIP)

OFFICE OF RURAL HEALTH CONFERENCE

September 21, 2011 Bend, OR

CHIP to CHIRP:



Blending Community Health Development and
Research

Presentation Team

- Beth Ann Beamer, BSN, RN – Community Health Improvement Partnership Director – Mountain View Hospital District
- Paul B. McGinnis, MPA- Director of Community Health, Quality and Practice Development – OHSU’s Oregon Rural Practice-based Research Network
- Margie Long – Elementary School Teacher- 509-J School District
- Thomas Machala, MPH, RN – Jefferson County -Director of Public Health
- Carolyn Harvey – Healthy Communities Coordinator – Jefferson County Public Health

- ***PATCH STUDY Principal Investigator – Monica Hunsberger, PhD, RD, PPH (Responsible for overall conduct of research)***

Mountain View CHIP

- Started in 2006 with Office of Rural Health funding and support
- Community partnership development
- Community assessment and partnership education
- Focus area identification based on indicators and perception that concern was amenable to community change efforts
- Actions to address identified priorities

Current focus areas for CHIP

- Healthy Body Weight Initiatives, especially as they relate to chronic disease prevention
- Health infant brain development
- Early childhood caries prevention
- Research to support the above efforts

Community-based Participatory Research(CBPR)

- A systematic inquiry that involves collaboration of those who are affected by the issue under study to generate new knowledge, educate, act and effect social change (Green 2001)
- Mobilizing a small, rural, diverse community for research
- Using community based research to support health policy advocacy

CBPR...it's just easier to say!

- Issue is community-identified
- Builds on community strengths
- Equitable power-sharing
- Co-learning and capacity-building
- Iterative: Cycles of investigation, reflection, action
- Designed to be of value to the community, action-oriented
- NWHF has provided training

PATCH Facts

- \$180,000 in funding from the Northwest Health Foundation
- 2-year Project – School year 2008 through 2010
- Financial Control through Mt. View Hospital Foundation – “doing business as” The Mountain View – Community Based Participatory Research Partnership

PATCH Research Questions

- Policy Minded Research Questions:
 - 1) Do calorie labels at the point of purchase influence food choices of middle school students and what are their perceptions?
 - 2) Does scheduling recess before lunch, the reverse of the current system, improve nutrient consumption and changes classroom behaviors among elementary age students?
 - 3) How do children and parents perceive body mass index (BMI) surveillance and notification?

PATCH Methods

- Calorie Labels at Point of Purchase (Middle School)
 - Mixed methods design
 - Gross Calories consumed with matched menus for one month
 - Interviews with 32 students from each grade
- Reverse Recess (Elementary School)
 - Mixed methods design
 - Control and intervention group within one school
 - ✦ 5 plate waste measurements across all seasons
 - Interviews with teachers, staff, and food service
- BMI Notification
 - Focus groups with parents and students
 - English and Spanish groups

PATCH Results Calorie Labels

Meal	Kcal consumed per Student		G Fat consumed per Student	
	Pre-Label	Post-Label	Pre-Label	Post-Label
1	740	766	26.0	27.2
2	725	602	28.3	23.5
3	596	576	16.3	16.2
4	807	748	34.0	30.9
6	819	672	24.6	20.8
7	669	662	27.6	26.9
8	570	545	17.1	16.2
9	430	441	11.7	13.1
10	745	767	27.9	28.5
11	711	617	23.5	20.0
12	617	579	19.7	17.0
13	773	745	33.4	31.4
14	689	641	25.1	22.5
15	559	467	17.8	13.4
16	868	737	23.6	17.2
17	366	363	13.4	12.1
Average	668±138	621±122	23.1±6.6	21.1±6.4
Kcal/student Mean difference= -47 Std. Dev of difference=14 95% CI= -77 to -18 P=0.0040		Total Fat g/student Mean difference= -2.1 Std. Dev of difference=0.6 95% CI= -3.3 to -0.9 P=0.0025		

PATCH Results Calorie Labels Continued

- students want nutrition information, it's a schools duty to help achieve/maintain a healthy weight
- understanding /use nutritional information related to home environment
- taste , food appearance, nutrition and being a healthy weight are important to most students
- most but not all students admitted to noticing and using the calorie labels to make healthier food choices
- the calorie labels and nutritionally related topics in general were not discussed among students

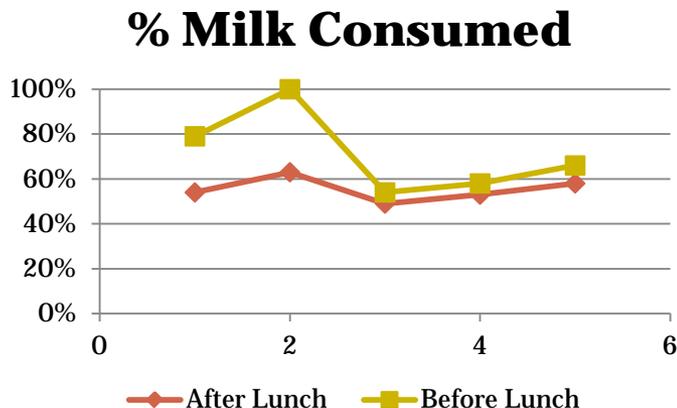
PATCH Results Reverse Recess

Student Food Consumption by Day and Recess Order (Median)					
Day	Recess Order	% Entrée Consumed	% Vegetable Consumed	% Fruit Consumed	% Milk Consumed
1	Before Lunch N=92	71%	12%	6%	79%
	After Lunch N=135	71%	12%	0%	54%
2	Before Lunch N=108	74%	0%	27%	100%
	After Lunch N=165	74%	0%	31%	63%
3	Before Lunch N=110	61%	36%	100%	54%
	After Lunch N=156	59%	50%	61%	49%
4	Before Lunch N=104	83%	100%	16%	58%
	After Lunch N=165	84%	100%	19%	53%
5	Before Lunch N=107	72%	100%	22%	66%
	After Lunch N=163	73%	100%	24%	58%

- Median percent of the standard portions of entrees and vegetables, and fruits consumed varied from day to day but did not differ by group.

- The median percent of milk consumed was higher in the group with recess before lunch than for the group with recess after lunch on all 5 days tested.

- The probability of drinking the entire carton of milk was significantly greater in students having recess before lunch (42% vs. 25%, $p < 0.00$)



PATCH Results Reverse Recess Focus

Groups

- Noted the children were better able to settle in to their work when transitioning from the lunchroom, instead of the playground, to the classroom
- Additional staff were needed to facilitate the split schedule
- Noise levels in the lunchroom were viewed as about the same: All transitions from the playground were considered '*noisy*'
- Most had a favorable opinion of the reverse recess trial, and noted that the grade split necessary to accommodate the intervention and control classroom division was beneficial to the lunchroom environment

PATCH Results BMI Focus Groups

- Theme 1 : Generally viewed as a routine task
 - ✦ Some discomfort among minority of students
 - ✦ Most students wished to know their weight
- Theme 2: Perceived responsibility for maintenance of childhood weight
 - ✦ Parent perceived as having main responsibility
 - ✦ Students perceived themselves as responsible
 - ✦ Some felt school was playing its part; while thought the school could improve
- Theme 3: BMI notification perceived as important, though of limited impact
 - ✦ Most did not recall the letter or discuss it with their children
- Theme 4: Identified Barriers to Effectiveness of BMI Screening
 - ✦ Weight misperception, Lack of concern regarding overweight
 - ✦ Poor understanding of graph and BMI
 - ✦ Lack of communication between parents and school
 - ✦ Cultural issues

PATCH Conclusions

- Menu labeling was meaningful and well received; this will continue
- Reverse Recess did not have the impact on dietary intake we hypothesized but milk intake improved and there were other unintended positive outcomes
- BMI screening will continue but without notification at this point; culturally relevant and literacy level appropriate materials are needed

Margie

- Acronyms and professional vocabulary
 - Frequent clarification is required for understanding for those outside the research community.
- Readability of questionnaires and surveys
 - Consideration for the literacy level of participants is essential.
- Partnership and participation
 - Selection of participants must be scrutinized carefully to avoid a conflict of interest.

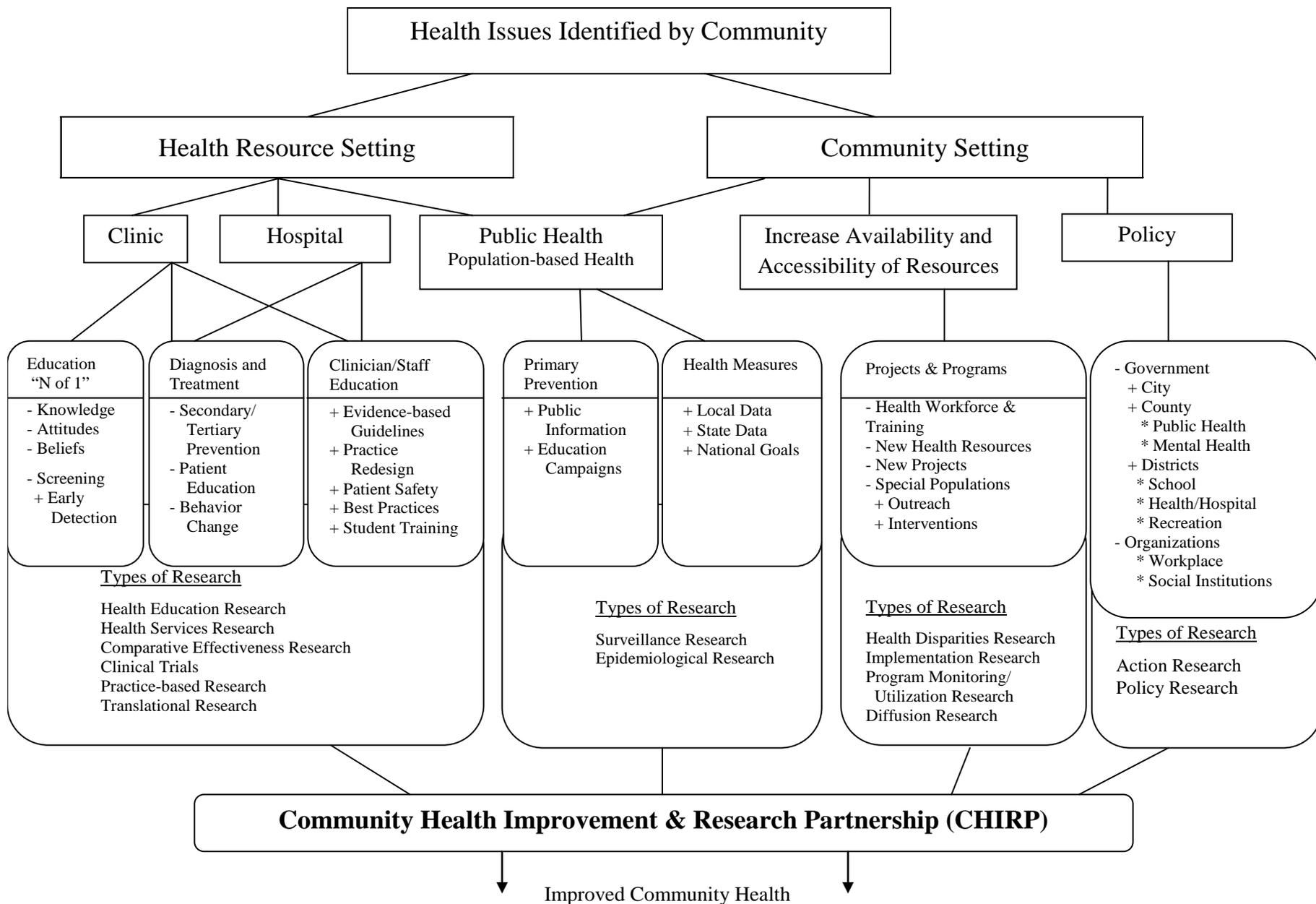
Teacher's as Advisors

- School teachers are an important component of the MV-CBPR. They have participated to the extent possible during the summer months. We need their regular participation on the MV-CBPR. In order for teachers to attend MV-CBPR meetings during the school year from 11:00 am to 1:00 pm we must compensate the 509-J School District for substitute teachers in their absence. The hourly rate is \$20.00 and we anticipate needing 5 teachers per meeting at 18 scheduled meetings for a total of 180 hours.

Tom

- Jefferson County Public Health Director
- Public Health's primary roles have been surveillance and assessment, as well as community-based programming
- Obesity epidemic as the "coming storm"
- Children represent the best opportunity for primary prevention
- Policy change impacts the broadest swath of the population

Figure 1. Potential Research and Community Project Activities through Blending Community Health Development and Research



Surveillance System

- ▣ Adult and Youth (8th and 11th grade)

- ▣ Self Reported

- ▣ Results

 - Youth

 - Adult

- ▣ Actual Measures

- ▣ What happened when we compared the two among middle and high school students?

Carolyn

- Community Healthy Eating Active Living Programs:
 1. Diabetes Prevention Program (WSO)
 2. Health Challenges/Moving Mtns/Cardio Challenge
 3. LWCD/Tomando de Control
 4. Willow Creek Walking Path
 5. Energi /Bike Racks/Fishing Pond/Skate Park
 6. SRTS/ After-school Bike Club(Gearheads)/ HEAL Coalition
 7. Madras Aquatic Center / Rec Dept/ MAC Dash
 8. Westside Elementary potential

Motivation for Participation?

- ❑ Small rural community CHIP and Healthy Communities programs collaborate on most activities related to healthy eating/active living.
- ❑ Research data from these types of projects is essential for obtaining grant dollars.
- ❑ Compliment each other around the power of policy in health outcomes, making the healthy choice the easy choice.
- ❑ Personal note: the need to “start at the very beginning” with children to effect the biggest change.