

Engaging Residents and Residency Clinics in Community Projects: Case Studies

Sarina Schrager, MD, MS; Brian Arndt, MD;
Karina Atwell, MD, MPH; Jennifer Edgoose, MD, MPH;
Allison Couture, DO; Magnolia Larson, DO

April 28, 2019

Disclosures

- We have no disclosures

Objectives

- Identify the important components of population and community health education in family medicine,
- Describe methods to involve residents and residency clinics in community projects,
- Summarize techniques to build solvent and enduring relationships between residency clinics and community organizations.

Although primary care and public health share a goal of promoting the health and well-being of all people, these two disciplines historically have operated independently of one another... The core principles include a common goal of improving population health, as well as involving the community in defining and addressing its needs. Strong leadership that works to bridge disciplines, programs, and jurisdictions; sustainability; and the collaborative use of data and analysis are the other principles... The challenges in integrating primary care and public health are great—but so are the opportunities and rewards.

REPORT BRIEF | MARCH 2012

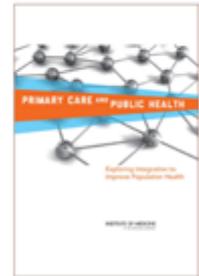
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Primary Care and Public Health

Exploring Integration to Improve Population Health



Department of Family Medicine
and Community Health

UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH

2015



School of Medicine
and Public Health

UNIVERSITY OF WISCONSIN-MADISON

2005

FamPop2015 Preconference Workshop

K. Rindfleisch, J. Prunuske,
M. Silberberg, R. Lankton, K.
Deligiannidis, J. Edgoose, V.
Martinez-Bianchi, J. Lochner,
B. Arndt, J. Westfall, A.
Perkins, K. Devlin, K.
Griswold, H. Bleacher, H.
Ringwood, K. Uduhiri, J.
Benson, N. Pandhi, D. Power

STFM Annual Spring Conference
Orlando, FL
May 2015

Three Community Health Responsibilities for Family Doctors

1. Understand the difference between “health” and “the healthcare system”:
 - Gain and maintain an understanding of the most important determinants of health
 - Support public health professionals and community partners in educating policy makers and the public on the most important determinants of health
 - Encourage individuals and communities to demand and to create the conditions necessary for health
 - Advocate for individuals and communities in their pursuit of the conditions necessary for health
2. Lead the way to an equitable, effective, affordable healthcare system:
 - Explore the different experiences of diverse populations interacting with the healthcare system
 - Create clinical systems that assure equitable healthcare to all patients regardless of their background
 - Develop and support models of care that maximize patient engagement and empowerment
 - Recruit and retain a diverse healthcare workforce
 - Support patient- and community-advisory boards representative of the clinical populations served
 - Conduct and/or support research that is patient- and community-engaged.
3. Be a partner:
 - Collaborate and/or support collaborations with public health professionals and community partners to address the upstream determinants of health
 - Gain and maintain skills in community collaboration
 - Offer your clinical and other content expertise
 - Gain and maintain awareness of the benefits of your professionalism and position of privilege
 - When partnering, know your role including when to lead and when to step back and follow the leadership of others
 - Share the stories you have been entrusted with

Liaw W, Rankin J, Bazemore A, Ventres W. Teaching Population Health: Community Oriented Primary Care Revisited. *Academic Medicine*.92(3):419, March 2017.

Teaching Population Health: Community-Oriented Primary Care Revisited

Winston Liaw, MD, MPH, medical director, Robert Graham Center; Jennifer Rankin, PhD, MPH, senior manager, Research and Product Services, HealthLandscape, Robert Graham Center; Andrew Bazemore, MD, MPH, director, Robert Graham Center; and William Ventres, MD, MA, research associate, University of El Salvador, Institute for Studies in History, Anthropology, and Archeology

The passage of the Affordable Care Act and the growing recognition of the importance of social determinants of health have spurred calls for the reintegration of public health and primary care.¹ Health care professionals hope to leverage the explosion of available patient and community-level data² but lack a road map for achieving this aspiration.

Community-Oriented Primary Care (COPC) is a model that helps providers respond to population-level concerns by marrying public health with primary care.³ Implementing COPC is appropriate for many practice settings, including patient-centered medical homes and accountable care organizations, both of which require strategies to improve population health and engage patients. COPC has a rich history and is ripe for reintroduction.

History

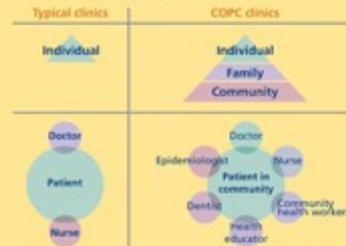
- 1940 Sidney and Emily Kark open South Africa's first health center in Pholela, a Zulu tribal reserve. The Karks realize that serving this culturally diverse, rural, impoverished population requires more than providing acute medical care. Their center focuses on the health of the community, and thus emerges COPC.¹
- 1957 During medical school, H. Jack Geiger trains with the Karks and incorporates COPC principles into the application for the first federally funded community health center, noting "the need is not for the distribution of services to passive recipients, but for the active involvement of local populations."¹
- 1984 The Institute of Medicine describes the COPC model. Regrettably, in a payment system that incentivizes volume, COPC concepts fail to gain widespread traction, and many federally funded health centers struggle to incorporate COPC.⁴
- Today While COPC started in two sites, the concept is now embedded within over 8,000 federally qualified community health centers.*



*The authors created the map using the Health Resources Services Administration Data Warehouse.

How COPC Differs From Typical Clinics

- COPC focuses not just on individuals but also on families and communities in the context of social determinants.
- To improve population health, COPC relies on a team with a wide spectrum of skills.⁴



COPC Steps

COPC mirrors steps for clinically evaluating patients. Rather than identifying any one patient's medical problem, developing a treatment plan, and determining the plan's effectiveness, one conducts similar steps on a population within a defined community.⁴

Steps	Examples
Define the community of interest	All people living in the census tracts that constitute a clinic's service area
Identify the health problem	High rate of obesity Lack of safe places to exercise
Develop and implement interventions	Partner with the local YMCA to provide discounted memberships and free classes for clinic patients
Conduct ongoing evaluation	Track how many people enroll and participate Observe trends in obesity

Community involvement is crucial to each COPC step!

Next Steps

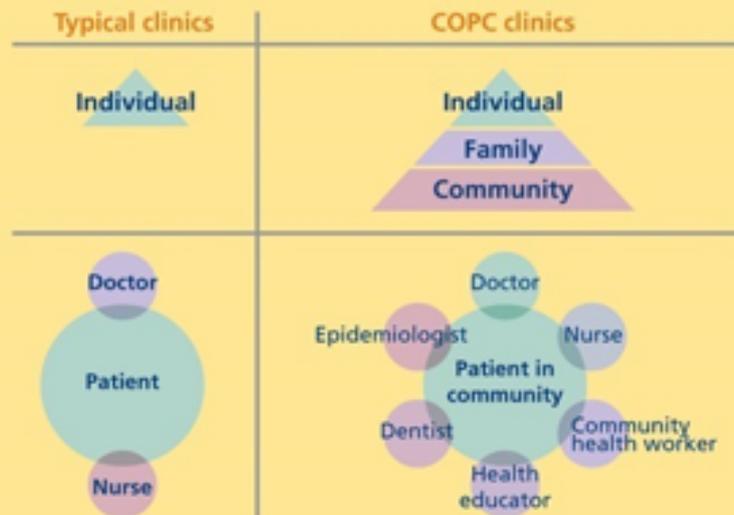
- Incorporate COPC concepts into didactics and into quality improvement projects for learners.
 - The Robert Graham Center and the National Association of Community Health Centers have created a COPC curriculum to enable experiential learning of COPC principles.⁵
 - The University of Nebraska Medical Center and George Washington University both offer a master's in public health with a concentration in COPC.^{2,8}
 - A.T. Still University requires family medicine residents at certain sites to participate in COPC projects.
- Incorporate COPC into practice.

COPC is a powerful framework for teaching and improving population health.

Funding/Support: This work is supported by the National Association of Community Health Centers' cooperative agreement from the Health Resources and Services Administration, Bureau of Primary Health Care (HHS/ASPR/HFHC).
References: See Supplemental Digital Appendix 1 for complete bibliographical information <http://links.lww.com/ACADMED/9A427>.
Author contact: wliaw@rghc.org; ventres@uiowa.edu; [Twitter: @wliaw](https://twitter.com/wliaw)

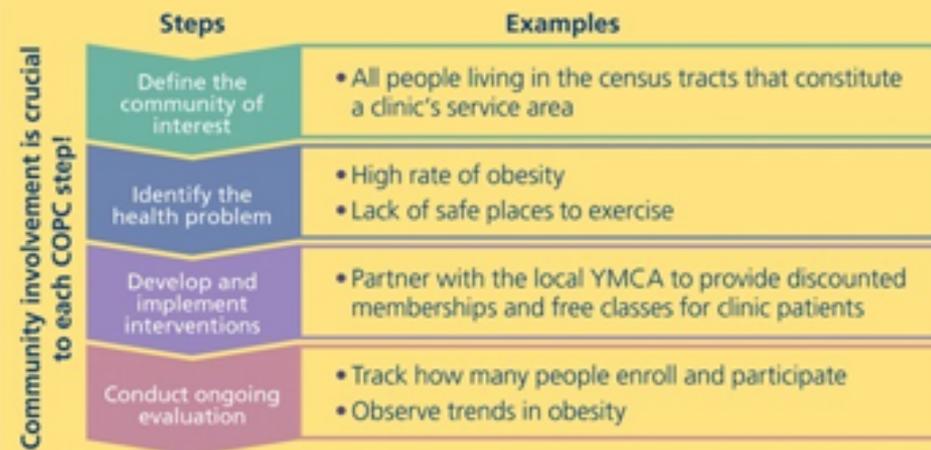
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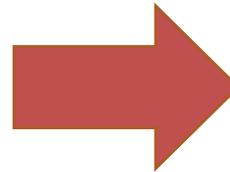
Case Studies

2020
Fitness & Lifestyle
CHALLENGE

UW Health Verona Clinic

Our Community's Health

~ 27% of Verona clinic adults are obese



More than 35% of US adults are obese (CDC)

Healthy People 2020 aims to reduce obese adults to 30.5% by the year 2020

Chronic Health Condition Summary - Verona

<i>Condition</i>	<i># Patients</i>	<i>% Patients</i>	<i>% Female</i>	<i>% Male</i>
Obesity	3,074	26.4	46.5	53.5
Hyperlipidemia	2,323	16.1	37.8	62.2
Hypertension	2,149	14.9	46.0	54.0
Depression	2,095	14.5	66.3	33.7
Smoking	1,557	11.3	41.4	58.6
Anxiety Disorder	1,520	10.5	59.7	40.3
Chronic Back Pain	1,415	9.8	55.6	44.4
Opioid	1,287	8.9	55.0	45.0
Asthma	836	5.8	52.4	47.6
Osteoarthritis	673	4.7	48.9	51.1
Diabetes	595	4.1	43.2	56.8
Arrhythmias	417	2.9	50.6	49.4
Cancer	342	2.4	55.8	44.2
Alcohol Disorder	327	2.3	35.5	64.5
Coronary Artery Disease	286	2.0	27.3	72.7
Osteoporosis	272	1.9	73.2	26.8

Who should be involved in addressing **obesity** in our community for Healthy Verona 2020:

- Our clinic as host → UW **Primary Care Physicians as leaders**
- Nutrition → community **Dietician**
- Exercise → yoga instructor, local gym discounts
- Behavioral Health → clinic **behaviorist**
- Insurance → wellness benefit
- **The USPSTF and AAFP recommend that clinicians offer or refer adults with BMI ≥ 30 to intensive, multicomponent behavioral interventions**

2020 Fitness & Lifestyle CHALLENGE

UW Health Verona Clinic



<http://www.fammed.wisc.edu/2020challenge>

- 20 week program for 20 overweight or obese patients within the clinic
- Monthly group visits (UW Health Verona, Hy-Vee, Anytime Fitness, & BPNN)
 - Guided stretching/relaxation with coach
 - Healthy meal prepared & shared
 - Educational topics (SMART goals, reading food labels, practical snacking, healthy eating out tips, mindful eating, overcoming barriers, strength-training)
 - Small group facilitated SMART goal setting
- Weekly nutrition support (recipes, grocery lists, approximate costs)
- Interim (optional) group sessions for 1 hour discussion on nutrition, exercise, mindfulness led by resident physicians

Group Visit Format

- 20 patients per group
 - Invited by personal physician based on readiness
 - BMI >30
 - Approved insurance
- Expectation to attend 80% of sessions (5/6 group sessions)
 - Exercise at least 2 days a week
 - Try 2 new recipes per week
 - Collect grocery receipts

Community Partners – NUTRITION

- HyVee Grocery (“corporate”)
 - Dietician
 - Individual sessions
 - MyFitnessPal guidance
 - 10% discount on all grocery during 20 weeks
 -  **Field trip:** Eating out, grocery tour



- Miller & Sons Supermarket (“local”)
 - \$10 gift cards
 - 2 “regional” locations



Community Partners – EXERCISE

- Anytime Fitness

- Discounted membership
- Access to personal trainer
- 3 local franchise locations
- **Field trip: “treadmill test”**



- Dane County YMCA



Community Partners – INSURANCE

- \$100 incentives from three local insurers as part of wellness benefit program
- Helps offset costs associated with group visit copay



Outcomes

- Participant improvements
 - BMI, blood pressure, A1c, cholesterol and diabetes parameters if indicated
 - **Weight decreased** 252.2 to 247.2 pounds ($p=.03$)
- Improved **mood** on **PHQ-9**
 - PHQ-9 scores improved from 6.0 (mild depression) to 3.6 points (minimal depression; $p=0.019$)

Outcomes

- Improved **quality of life** using the **SF-36**
 - Composite SF-36 score change 50.8 to 62.5 points (p=.06)
 - Emotional well-being and pain sub-scales most improved (p<0.05)
- Improvement in 4 **self-care areas** (p<0.05)
 - Meal planning
 - Regular exercise 20 minutes twice weekly
 - Knowledge of pedometer use
 - Recognition of inexpensive methods of exercise; and healthy eating

2020
Fitness & Lifestyle
CHALLENGE
UW Health Verona Clinic

- Valuable clinic-community partnerships targeting Public Health issues
- New opportunities for residents to engage in a spin on group visits
- Improvements in patient and provider satisfaction
- **Small but statistical improvements in quality of life, mood, weight**
 - Guidance for Future Clinic Planning



Foundation for Madison's
Public Schools

Northeast Clinic and Lake View Elementary School Partnership

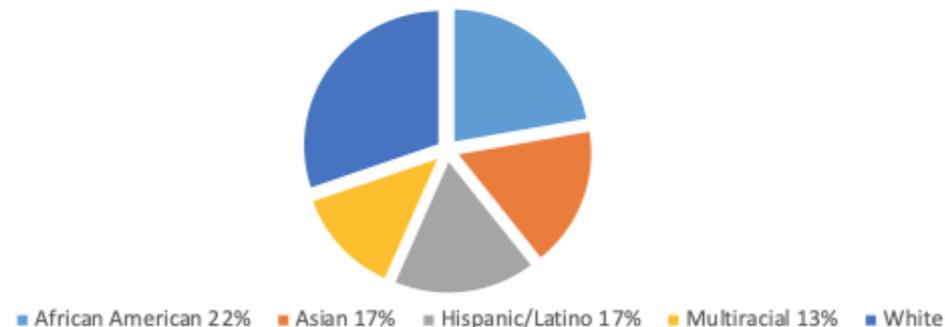


Lake View-- need



- 260 children
- ELL– 34%, Low income– 70%, Students with disabilities– 15%

Demographics

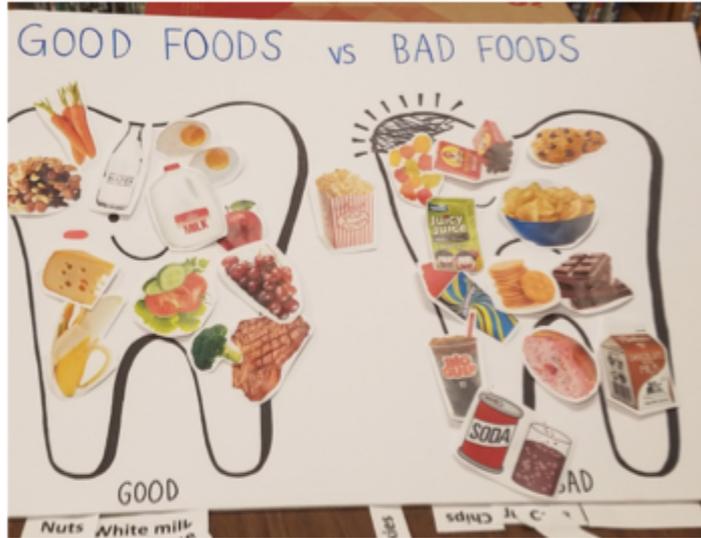


Timeline:

- May, 2012– FMPS luncheon
- August, 2012– 1st meeting with Lake View staff and principal, needs assessment
- Sept, 2012-May, 2013– Initial partnership exploration
- May, 2013– 1st Wellness day
- Ongoing– activities at parent nights, back to school bash
- April, 2018-Dec, 2018– After school leadership academy
- May, 2019– 7th annual Wellness day







Resident and staff involvement

- Individual resident projects
 - Food insecurity, backpacks to take home, food pantry engagement
 - Walking school bus
- Staff involvement in parent nights and Wellness day

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CHOP CHOP

COOKING CLUB

Opportunity for Intervention

- “Family meals have been associated with higher diet quality and nutrient intake.” — **Dietary Guidelines Advisory Committee**
- “Learning to cook at a young age helps children retain healthy habits throughout the lifespan.” — **Journal of Family Psychology**

Could I teach children and families in my community how to cook together to form healthy eating habits?

Badger Prairie Needs Network



Badger Prairie Needs Network

- State of the art culinary facility, available to rent space
- In the Verona community
- Already established a group cooking class model
- Badger Prairie Cooking Club
 - a once-a-month nutrition and cooking education class for ages 55 and over
 - led by 2 faculty physicians along with a dietician
- BPNN interested in expanding nutrition courses

DFMCH Community Health Micro Grant

- Designed to provide support to faculty, residents, fellows and staff for community-engaged projects at UW Health family medicine clinics and in the communities they serve
- Project was funded for 1 year (2017) with \$1500

 <p>The Prairie Kitchen's ChopChop Cooking Club is a Sunday afternoon cooking and nutrition class for all children age 6+ and their families.</p> <p>chopchopmag.org</p>	<p>February 26th</p> <p>Beet-and-Carrot Slaw Wraps</p>	<p>March 19th</p> <p>Triple Green Pesto Pasta</p> 
	<p>April 9th</p> <p>Green-and-Bean Quesadillas</p>	<p>April 30th</p> <p>Beanie Burgers</p> 

The *ChopChop Cooking Club* is an engaging and exciting class designed to teach kids about food, cooking, nutrition, and health.

Who: Children age 6+, must be accompanied by an adult.

Maximum of 3 child participants for every 1 adult chaperone

Where: The Badger Prairie Needs Network, 1200 E Verona Ave, Verona WI

When: 1:00-2:15pm on Sundays: 02/26, 03/19, 04/09, and 04/30

Cost: The 4 class course requests a \$5 donation per child to benefit BPNN.

Sign-up: Register online at www.bpnn.org/cooking-classes or e-mail ChopChopCookingClubBPNN@gmail.com for the registration form.



Early ChopChop-ing of Fruits and Vegetables Increases Learning Among Children

CHOPCHOP

Allison Couture, DO;
Brian Arndt, MD; Maggie Larson, DO

Department of Family Medicine
and Community Health
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WISCONSIN
HAPPY HEALTHY
KIDS NETWORK

HyVee

UW Department of Family Medicine and Community Health

Introduction

- 16.5% of US children under 18 live in households with inconsistent access to necessary health food¹
- What Works for Health* indicates taste testing fruits and vegetables increases consumption among children, adolescents, and adults^{2,3,4}
- ChopChopKids: a national, non-profit organization that teaches children and their families how to cook healthy meals together

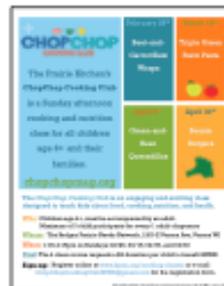
Objectives

- Understand the importance of a diet rich in fruits and vegetables for a family unit
- Identify and access free educational resources to inspire community families to cook real, nutritious food together

Materials & Methods

- ChopChop Cooking Club* was created as a UW Department of Family Medicine and Community Health residency QI project
- Hosted at a local Dane County food pantry with access to a commercial kitchen
- Children ages 5-12 years old with 1 adult attended a series of 4 classes in 4 months
- Pre/post-course surveys collected to evaluate fruit/vegetable consumption and cooking skills
- Project was funded for 1 year with \$1500 micro grant from the UW DFMCH (food purchases, kitchen supplies, marketing)

Class Poster



Class Outline

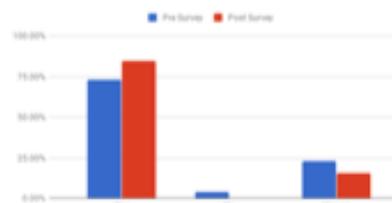


Results

- Child participants: **46** Number of sessions: **14**
Parent participants: **51** Money donated: **\$315**
- 73.0% of parents reported their child learned a great deal about eating fruits and vegetables
- 85.7% of parents reported development in their child's ability to cook
- 55.0% of parents reported that the course developed their ability to cook



Do you feel that your child would be willing to try a new recipe?



Graph 1: Recipe Willingness Pre- vs Post-

Participant Reviews

- "Very organized from marketing, sign up, ongoing communication, and actual class. Great instructors. Supportive, friendly, and fun!"
- "[A strength of the ChopChop Cooking club was] giving small children the opportunity to cook and use tools in the kitchen."
- "Good exposure to cooking new foods."



Discussion

- The ChopChop Cooking Club created a fun learning environment, where families enjoyed exploring new ways to cook with fruits/vegetables
- A positive response to family cooking was evident
- Essentially no change fruit/vegetable consumption
→ Limitations: small group size, high health literacy, <100% retention
- Surveys showed that kitchen programming was associated with improved cooking skills for kids & adults, which is consistent with studies.
- Participating in community kitchen programming has been associated with enhanced food skills, improved community food security, and improved social interactions^{5,6}
- The course was an effective way for residents and faculty to engage in community health

Resources

ChopChopMag.org

- Alfaro-Graham J, Jensen M, P. Rabbitt, Christian A, Gregory, and Anika Singh. 2017. Household Food Security in the United States in 2016. *ERS-227, U.S. Department of Agriculture, Economic Research Service*
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- Reyon SR, Stroup OO, Stark LJ. The impact of a pilot cooking intervention for parent-child dyads on the consumption of foods prepared away from home. *Appetite*. 2016;99:1-11.
- Photo by Kate Neuman.

Children can create 30 new recipes!

Other Partners

- Clinic Staff
- UW Dietetic Interns
- Community Members
- UW School of Medicine and Public Health
Family Medicine Interest Group



Gawande, A. "The Hot Spotters." *The New Yorker*. Jan 24, 2011.



Hotspotters

Brought to our attention by Public Health Madison
Dane County and Madison Fire Department

Photo by Chris
Collins





City of Madison
Fire Department



UWHealth

DEPARTMENT OF
**Family Medicine and
Community Health**
UNIVERSITY OF WISCONSIN
SCHOOL OF MEDICINE AND PUBLIC HEALTH



Public Health
MADISON & DANE COUNTY

Healthy people. Healthy places.

Other partners:

- Aging and Disability Resource Center
- Care Wisconsin
- River Food Pantry

Northeast patients at Dryden Terrace

- **Gender:** male: 32%
- **Age:**
 - 18-49 yo 16%
 - 50-64 yo 44%
 - 65-79 yo 34%
 - 80+ yo 6%
- **Race/ethnicity** (*Dane County in parentheses*):
 - White 56% (86%)
 - Black 38% (5.4%)
 - Hispanic 0% (6.2%)
 - Asian 2% (5.6%)
 - Native American 2% (0.5%)
 - Other 2%

- **Insurance:**
 - 54% Medicare under 65
 - 10% Medicaid
 - 8% uninsured/unknown

Emergency Department (ED) visits:

- The average # of ED visits in the last 3 years
- 0.5 for all Northeast patients
 - 2.4 for Northeast patients living at Dryden Terrace

It is 3.4 times more likely that Dryden Terrace patients will visit the ED compared to the average Northeast patient.

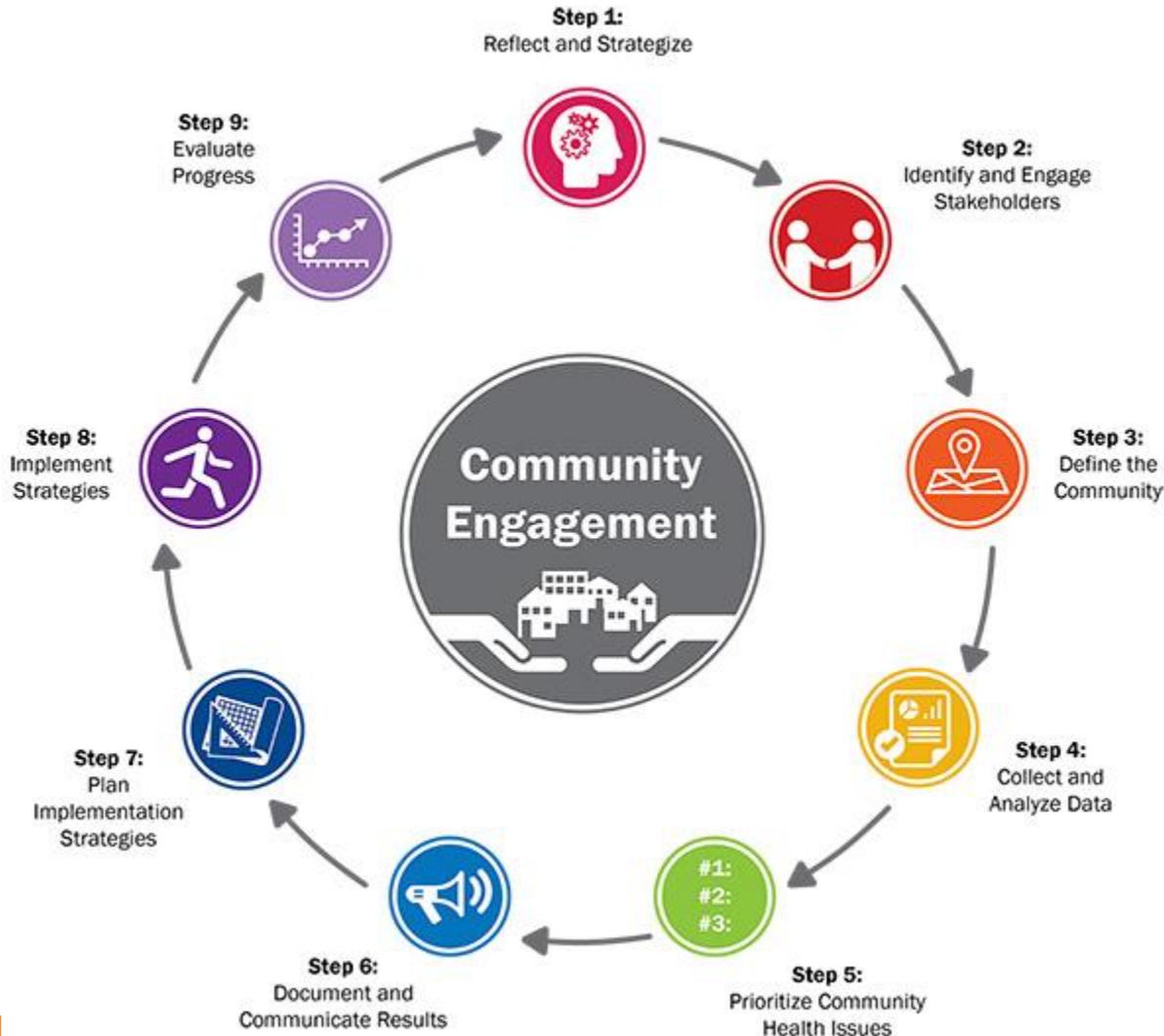
Disease Burden

Chronic Condition	% Dryden patients	% Northeast patient
Hyperlipidemia	67	19
Hypertension	65	17
Chronic Pain	61	21
Obesity	54	29
Sleeping disorder	35	11
Diabetes	33	6
Chronic back pain	30	12
Anxiety disorder	30	15
Osteoarthritis	28	6
Chronic ideny disease	28	4
Arrhythmias	26	4
Asthma	23	11

Rallying around a hotspotting community

GOALS (QUADRUPLE AIM)	APPROACH
<ul style="list-style-type: none">• Decrease social isolation and increase activation of the hotspotting community (<i>Patient experience</i>)• Decrease unnecessary utilization of first responder and health care resources (<i>Better outcomes and lower cost</i>)• Enhance provider morale through meaningful, effective community engagement (<i>Provider satisfaction</i>)	<ul style="list-style-type: none">• Collect quantitative data and qualitative narratives and respond with an equity and empowerment lens (work-in-progress)• Develop a home visit program with an interprofessional team focus (aspirational)• Promote group activities focusing upon community education, activation and empowerment• Facilitate other community partnerships

Community Health Assessment



Questions to consider for resident community health experiences

NEW/DEVELOPING

- What is the community identified issue or question addressed?
- Who is the target population?
- Who should be involved in identifying the problem?
- What data sources can be used to identify the problem?
- Who are key community partners?
Are there already efforts by community partners for similar community health issues?

ALREADY EXISTING

- Does the community want it?
- Are we reducing disparities?
- Are all the appropriate partners at the table?
- Is there evidence to support your work?
- Is it sustainable?

Barriers to Engaging Residents, Clinics, and Communities

- Residents have limited time
 - Busy schedules
 - Resident time availability often doesn't match those of community members
- Varied resident engagement
 - Not interested vs. someone with drive/takes initiative
- Varied clinical staff engagement
- Lack of a faculty lead
- Turnover of community partners/losing connections

Strategies to Consider:

- Assure strong faculty mentorship - compile and offer established faculty partnerships to residents
- Allow for deep-dives - provide a pathway tract for residents who want to focus on building community and population health skills
- Accountability - develop tools to track progress for monitoring and oversight
- Communication - identify shared virtual sites for collaborative documentation and storage of material
- Build and sustain connections - identify/appoint an outreach manager within the department
- Get excited!

Success



what people think
it looks like

Success



what it really
looks like

Break up into small groups

Share your individual community health resident experience project assessments

- What barriers are you experiencing, or do you foresee?
- What strategies might you recommend your group-mate?

Report out

- What community experiences did you learn about or were you inspired by?
- What barriers did you explore?
- What strategies did you learn to support success and sustainability?

Contact Us!



Sarina Schragger - sbschrag@wisc.edu

Maggie Larson - magnolia.larson@fammed.wisc.edu

Jennifer Edgoose - jennifer.edgoose@fammed.wisc.edu

Ally Couture - allison.couture@fammed.wisc.edu