NCI Implementation Science Approaches to Integrating Research into Practice and Policy

Cynthia Vinson, MPA
Public Health Advisor, Implementation Science Team Division of
Cancer Control and Population Sciences

Russell E. Glasgow, Ph.D.
Deputy Director, Implementation Science Team
Division of Cancer Control and Population Sciences

March 29, 2012

National Cancer Institute

Introduction to Implementation Science Team

Implementation Science Team

Name	E-mail
Russell Glasgow, PhD Deputy Director for Implementation Science	russ.glasgow@nih.gov
Laurie Cynkin, MHS Public Health Advisor	cynkinl@mail.nih.gov
Khair ElZarrad, PhD Cancer Prevention Fellow	elzarradmk@mail.nih.gov
Arshon Parker Contractor	parkerar@mail.nih.gov
Peyton Purcell, MPH Project Coordinator, CRTA	purcellp@mail.nih.gov
Michael Sanchez, MPH,CHES Public Health Advisor	sanchezgarciama@mail.nih.gov
Kurt Stange, MD Consultant/IPA	kcs@case.edu
Annabelle Uy, MS Program Analyst	uya@mail.nih.gov
Cynthia Vinson, MPA Public Health Advisor	cvinson@mail.nih.gov

Implementation Science Team Vision

To achieve the rapid <u>integration</u> of scientific evidence, practice, and policy, with the ultimate goal of improving the <u>impact of research</u> on cancer outcomes and promoting health <u>across</u> individual, organizational and community <u>levels</u>.

Implementation Science Team Priority Areas

BUILD:

- Build the science of implementation science (IS) through conceptualization, funding initiatives, methods that translate, publications and presentations.

PARTNER:

- Establish robust partnerships of community members, practitioners, decision makers, and researchers.

TRAIN:

- Develop ongoing training Networks for both researchers and practitioners.

BUILD

Goal: *Change the Research Paradigm (shift from efficacy to systems approaches)*

Short Term Objectives:

- Publish ≥5 articles in leading journals and present at ≥10 major national meetings on new IS concepts

- Continue to be a key planner and supporter of NIH D&I Meeting and related NIH/HHS initiatives to increase attention to and support of IS by NIH/HHS leaders, researchers, and the public
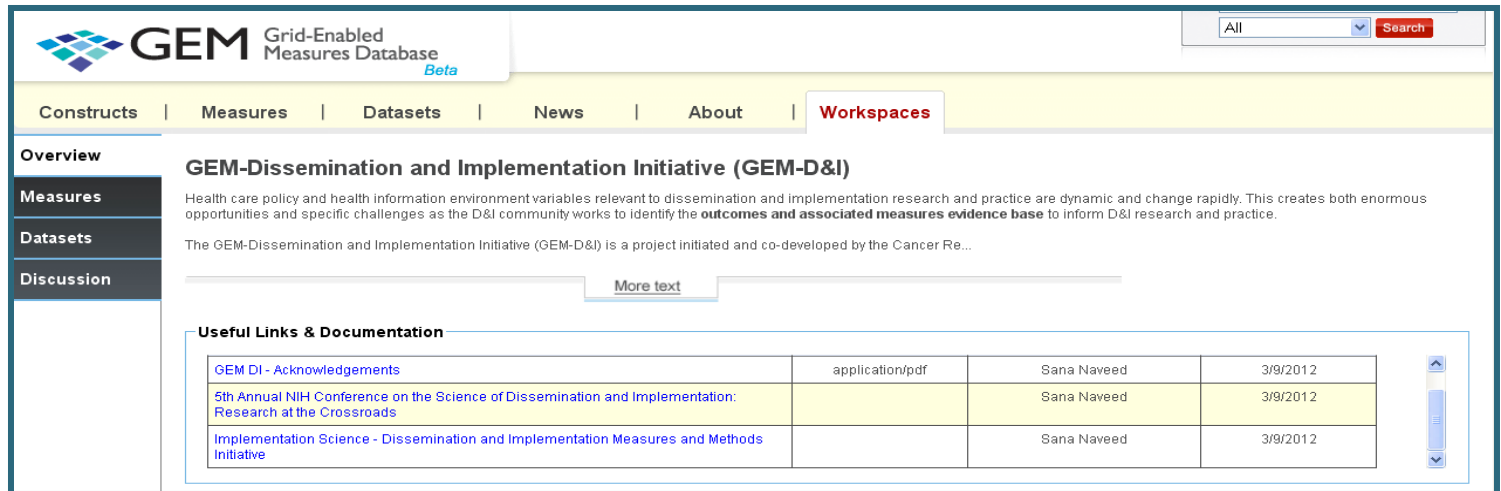
Long Term (2015) Objectives:

- Increase # of cancer-relevant IS grant submissions to PAR by 33%

- Increase # of funded cancer-relevant grants proposals to D&I PAR (and other mechanisms) by 25%

- Increase # of accepted cancer-relevant abstracts for presentation at D&I conference by 25%

The Major Cross-NIH D&I Funding Announcement

- R01 - PAR 10-038 ($500k per annum up to five years)
  R03 - PAR 10-039 ($50K per annum up to two years)
  R21 - PAR 10-040 ($275K up to two years)

- Participating Institutes: NIMH, NCI, NIDA, NIAAA, NIAID, NHLBI, NINR, NIDDK, NINDS*, NIDCD, NIDCR, NCCAM, FIC & Office of Behavioral & Social Sciences Research

- Starting October 2010, new standing review committee, Dissemination and Implementation Health Research

- Three submission dates per year: **February, June, October**

Dissemination and Implementation Measures and Methods Initiative

https://www.gem-beta.org/ (GEM Homepage)

http://cancercontrol.cancer.gov/IS/resources.html (IS Team Website)

What, Why, and Who

What is the D&I Measures and Methods Initiative?

Purpose: Bring together an international community of researchers and practitioners to create a growing and evolving resource for standardized, vetted D&I measures that can lead to comparable datasets and facilitate collaboration and comparison across disciplines and regions.

The D&I Measures and Methods Initiative and resource enables researchers and practitioners to:
- Identify and define constructs relevant to D&I research and practice;
- Learn about, comment on, and rate existing measures for D&I;
- Share new D&I measures;
- Identify missing D&I measures;
- Learn about strategies/methods relevant to D&I

Why should I get involved?

If you are interested in advancing the D&I field, this Initiative is an excellent way to contribute to the field and engage with colleagues. The D&I Measures and Methods Initiative gives you access to D&I constructs, measures, and methods developed by other colleagues and also provides you with a platform to share your own D&I measures.

Who Should Participate?

Researchers and practitioners involved or interested in D&I research

PARTNER

Goal: *Assist other projects to be more likely to improve health outcomes, succeed in reducing health disparities, and be sustainable*

Short Term Objectives:

- Be a key contributor on two trans-HHS efforts related to IS

- Support CPCRN to make identified contributions to local communities in 5 states

- Have at least one trans-NIH meeting or funding initiative on CER-T linking primary care and public health approved (e.g. a PAR or RFA)

Long Term (2015) Objectives:

- Establish and maintain 1 new national partnership per year involving multiple DCCPS branches and other institutes to support innovative IS initiatives (w/ HRSA, VA, CMS, and ACS) as well as continued partnership with CDC

Collaborate

TRAIN

Goal: *Establish a strong, supportive, evolving, <u>virtual</u> IS community*

Short Term Objectives:

- Have two successful years of the NIH Summer D&I Research Institute

- Continue NIH D&I Annual technical assistance workshop; and improve evaluation ratings

- Provide training and networking for an increased # of researchers, public health practitioners, and community members via R2R, Cancer Control P.L.A.N.E.T., IS Team website and other vehicles

- Organize and evaluate pilot mentorship program for 6 mentee-mentor pairs

Long Term (2015) Objectives:

- Train at least 140 promising new investigators and 40 established cancer-relevant investigators in IS

- Train 1,000 public health practitioners in IS knowledge and skills

● Home   ● Organizers   ● Agenda   ● Logistics   ● Application

Welcome

One of the most critical issues impeding improvements in public health today is the enormous gap between what we know can optimize health and healthcare and what actually gets used and implemented in everyday practice. The science of dissemination and implementation (D&I) seeks to address this gap by understanding how to best ensure that evidence-based strategies to improve health and prevent disease are effectively delivered in clinical and public health practice.

- D&I research draws from a variety of behavioral and social science disciplines and employs approaches and methods that in the past have not been taught comprehensively in most graduate degree programs.
- Though this field of research has gained incredible momentum in recent years, there remains a need to grow a cadre of both new and established scientists who are prepared to (1) address the complex process of bridging research and practice in a variety of real-world settings and to (2) conduct research that balances rigor with relevance and employs study designs and methods appropriate for the complex processes involved in dissemination and implementation.

What is Dissemination and Implementation (D&I) Research?

Dissemination research

Dissemination research is the systematic study of processes and factors that lead to widespread use of an evidence-based intervention by the target population. Its focus is to identify the best methods that enhance the uptake and utilization of the intervention.[1]

July 9-13, 2012

Training Institute for
Dissemination and
Implementation
Research in Health

Dolce Hayes Mansion | San Jose, California

Institute Goals

- Provide participants with thorough grounding in conducting D&I research

- Faculty and guest lecturers consist of leading experts in:
    - Theory
    - Implementation and evaluation approaches
    - Creating partnerships and multi-level,   transdisciplinary research teams
    - Research design, methods and analyses

- After training participants expected to help grow the field of D&I research by:
    - Giving talks
    - Leading seminars
    - Forming new collaborations
    - Mentoring
    - Submitting new D&I grant proposals

http://conferences.thehillgroup.com/OBSSRinstitutes/TIDIRH2012/index.html

Updates to P.L.A.N.E.T. and RTIPs

New version of Cancer Control P.L.A.N.E.T. and RTIPs launching in April/May 2012.

- **Major changes on site include:**

  – Removal of "Steps" on P.L.A.N.E.T.

  – Removal of Research and Practice Partners formerly found on Step 2.

    - Now features Research to Reality (R2R) in place of linking to Partners

  – **Including RE-AIM on both sites**

    - RTIPs programs scores on RE-AIM

    - RE-AIM tool for program planners included on RTIPs

http://cancercontrolplanet.cancer.gov/

Links to comprehensive cancer control resources for public health professionals

Home | About This Site | FAQ | Sponsors

DATA

State Cancer Profiles (CDC, NCI) ⓘ

COLLABORATION

Research to Reality (NCI) ⓘ

PROGRAMS

Research-tested Intervention Programs (RTIPs) (NCI, SAMHSA) ⓘ

EVALUATION

Reach Effectiveness Adoption Implementation Maintenance (RE-AIM) (NCI) ⓘ

RESEARCH SYNTHESIS

Guide to Community Preventive Services
(Federally supported) ⓘ

U.S. Preventive Services Task Force
(Federally supported) ⓘ

Evaluation of Genomic Applications in Practice and Prevention (EGAPP) ⓘ

Additional Research Evidence Reviews

PLAN

Comprehensive Cancer Control Plans ⓘ

Comprehensive Cancer Control Budgets

Resources

More about using these resources

TOPICS

- **Breast Cancer**
- **Cervical Cancer**
- **Colorectal Cancer**
- **Diet / Nutrition**
- **Informed Decision Making**
- **Obesity**
- **Physical Activity**
- **Public Health Genomics**
- **Sun Safety**
- **Survivorship**
- **Tobacco Control**

WHAT'S NEW

RE-AIM, a framework for evaluating health promotion and chronic disease management programs, joins the Cancer Control P.L.A.N.E.T. family.

After 6 years, the site gets a facelift and some reorganization.

Tell us what you think!

E-NEWSLETTER

Sign up to receive monthly updates on Cancer Control P.L.A.N.E.T.

FEEDBACK

We welcome your feedback on the Cancer Control P.L.A.N.E.T. and its satellite web sites. Thank you for helping to improve this site for the cancer control community.

SPONSORS

NATIONAL CANCER INSTITUTE

CDC — SAFER · HEALTHIER · PEOPLE™

AHRQ

SAMHSA — HHS

Home | Contact Us | Viewing Files | Privacy Policy | Disclaimer | Accessibility

Cancer Control P.L.A.N.E.T. is not affiliated with Planet Cancer. To visit Planet Cancer's site, please go to www.planetcancer.org.

Research to Reality

Search

| Home | Discussions | Cyber-Seminars | Featured R2R Partners | Mentorship | Events | About |

Sign Up | Login

Research to Reality is an online community of practice that links cancer control practitioners and researchers and provides opportunities for discussion, learning, and enhanced collaboration on moving research into practice.

Sign up to join the community!

Sign Up Today!

Already have an account? Log In.

Featured R2R Partner

Erin Robinson, MSW

The "You Carry Me, I'll Carry You" pilot links Missouri's Tobacco Quitline with the state Food Stamps Program. Meet Erin Robinson, the Dissemination Field Agent for this innovative and successful project.

Posted on March 27, 2012

Register now for April's Cyber-Seminar!

What if the social, environmental, behavioral and health care determinants of a community were measured and reported? Might this engage and empower multiple stakeholders – both individual and groups to take responsibility for working together to improve health, its determinants and equity? We invite you to join us for our next R2R cyber-seminar on Tuesday, April 10 from 2:00-3:00pm EST as we explore these questions. Find out more.

Recent Activity

Sunday March 25, 2012 at 1:15pm
Matthew has participated in the Discussion "Dispatches from the D&I Conference"

Sunday March 25, 2012 at 1:10pm
Marshall has participated in the Discussion "Dispatches from the D&I Conference"

Saturday March 24, 2012 at 3:54pm
Russ has participated in the Discussion "Dispatches from the D&I Conference"

Thursday March 22, 2012 at 6:03pm
The Event "Health Care's Blind Side:" Exploring Solutions to Address Social Needs has been added to the Calendar.

Thursday March 22, 2012 at 10:50am
Lisa has participated in the Discussion "Dispatches from the D&I Conference"

1 of 4 >>

Learn about R2R

Watch the video tutorial to learn how to use Research to Reality.

Share   More info

0:00   You Tube

Events

Next Event
March 27, 2012 3:00PM - 4:00PM EDT
Introducting the County Health Rankings and Roadmaps 2012 Website

Calendar

«	March					»
S	M	T	W	T	F	S
				1	2	3

http://researchtoreality.cancer.gov

Cancer Control P.L.A.N.E.T. Home

Go Sun Smart (GSS)

Email   Print

On This Page

- The Need
- The Program
  - » Implementation Guide
- Community Preventive Services Task Force Finding
- Time Required
- Intended Audience
- Suitable Settings
- Required Resources
- About the Study
- Key Findings
- Publications

Products

Preview and order the materials from the developer

Highlights

Purpose	Designed to promote sun safety to ski area employees. *(2005)*
Program Focus	Behavior Modification
Topic	Sun Safety
Age	Adults (40-65 years), Older Adults (65+ years), Young Adults (19-39 years)
Gender	Female, Male
Race/Ethnicity	Hispanic or Latino, White, not of Hispanic or Latino origin
Setting	Workplace
Funded by	NCI

RTIPs Scores

Research Integrity
3.8

Intervention Impact
5.0

Dissemination Capability
4.0

1.0 = low   5.0 = high

RE-AIM Scores

Reach
60%

Effectiveness
100%

Adoption
50%

Implementation
80%

Context
Yes

The Need

+ Show All

Excessive exposure to ultraviolet radiation (UVR) from sunlight is both the primary and the most easily prevented cause of skin cancer. Total lifetime exposure to UVR is positively associated with several types of skin cancer, including basal cell carcinoma, squamous cell carcinoma, and possibly melanoma. Intermittent and severe exposure (i.e., sunburning) may also be linked to the development of melanoma.

Although exposure to UVR in ... Show more ▾

RE-AIM Notes   Export   Email   Print
Hide ✕

Use this area to take notes about how this program might work for you.

▼ Reach

http://rtips.cancer.gov/rtips

Although exposure to UVR in ... [Show more ▾]

Back to Top

The Program

Description

Go Sun Smart is a workplace intervention that uses written, electronic, visual, and interpersonal communication methods to promote sun-safe practices to ski area employees. A six-unit training program consisting of a comprehensive instructor's guide, slide presentation, and employee brochures is delivered to employees by supervisors during routine departmental

meetings. The training is designed to increase employee awareness of ... [Show more ▾]

Implementation Guide

The Implementation Guide is a resource for implementing this program. It provides important information about the staffing and functions necessary for administering this program in the user's setting. Additionally, the steps needed to carry out the research-tested program, relevant program materials, and information for evaluating the program are included. The Implementation Guide can be viewed and downloaded in the Products page.

Back to Top

Community Preventive Services Task Force Finding

This program is an example of interventions in outdoor occupational settings (Sun Safety) which has an **insufficient evidence** finding from the Community Preventive Services Task Force, as found in the Guide to Community Preventive Services. Insufficient evidence means the available studies do not provide sufficient evidence to determine if the intervention is or is not effective. This does not mean that the intervention does not

... [Show more ▾]

THE COMMUNITY GUIDE.org
What Works to Promote Health

Back to Top

Time Required

The estimated time required to implement the Go Sun Smart program includes 45 minutes for employee training, one day to post materials, and two days for staff to monitor the ski area. Maintenance of the signs and targeted messages across various informational channels (e.g., newsletters, email messages) takes an additional eight hours over the course of the ski season.

Back to Top

Intended Audience

The primary audience for the Go Sun Smart is ski area employees.

Back to Top

Suitable Settings

Go Sun Smart is designed to be administered at ski areas ranging in size from small, single operators to large, multi-area corporations.

Back to Top

Required Resources

RE-AIM Notes

Hide ✕

Export   Email   Print

Use this area to take notes about how this program might work for you.

▼ **Reach** ⓘ

Absolute number, proportion and representativeness of individuals who participate in the program. Read More.

Your overall rating of this program's **potential reach** in your situation:

⊖ ☆ ☆ ☆ ☆ ☆

Total # of people who could **benefit**: [ ]

Total # of people you could **reach**: [ ]

Your demographic focus:
[ ]

Barriers to reaching your target population::
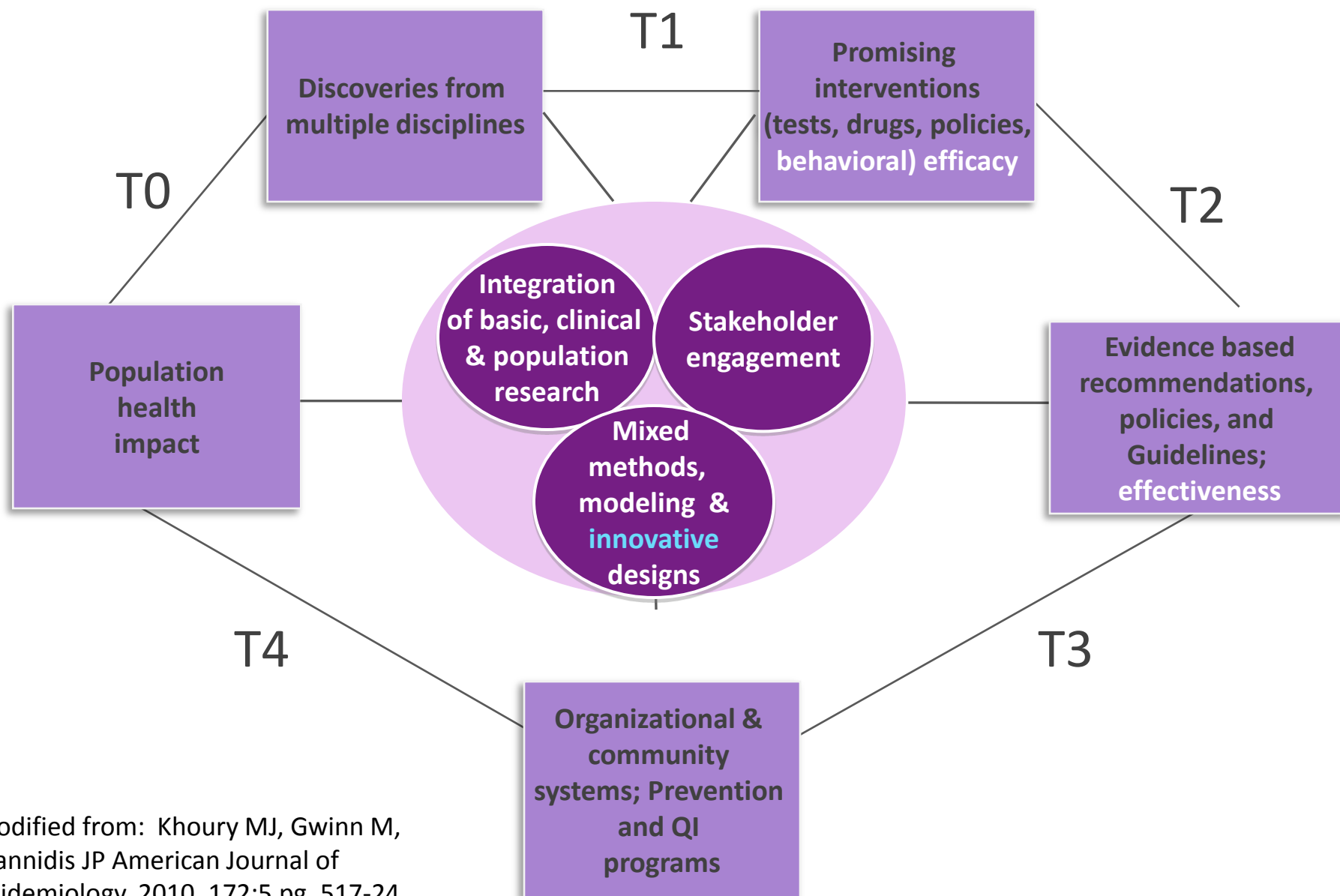[ ]

▶ **Effectiveness** ⓘ

▶ **Adoption** ⓘ

▶ **Implementation** ⓘ

Implementation Science Models
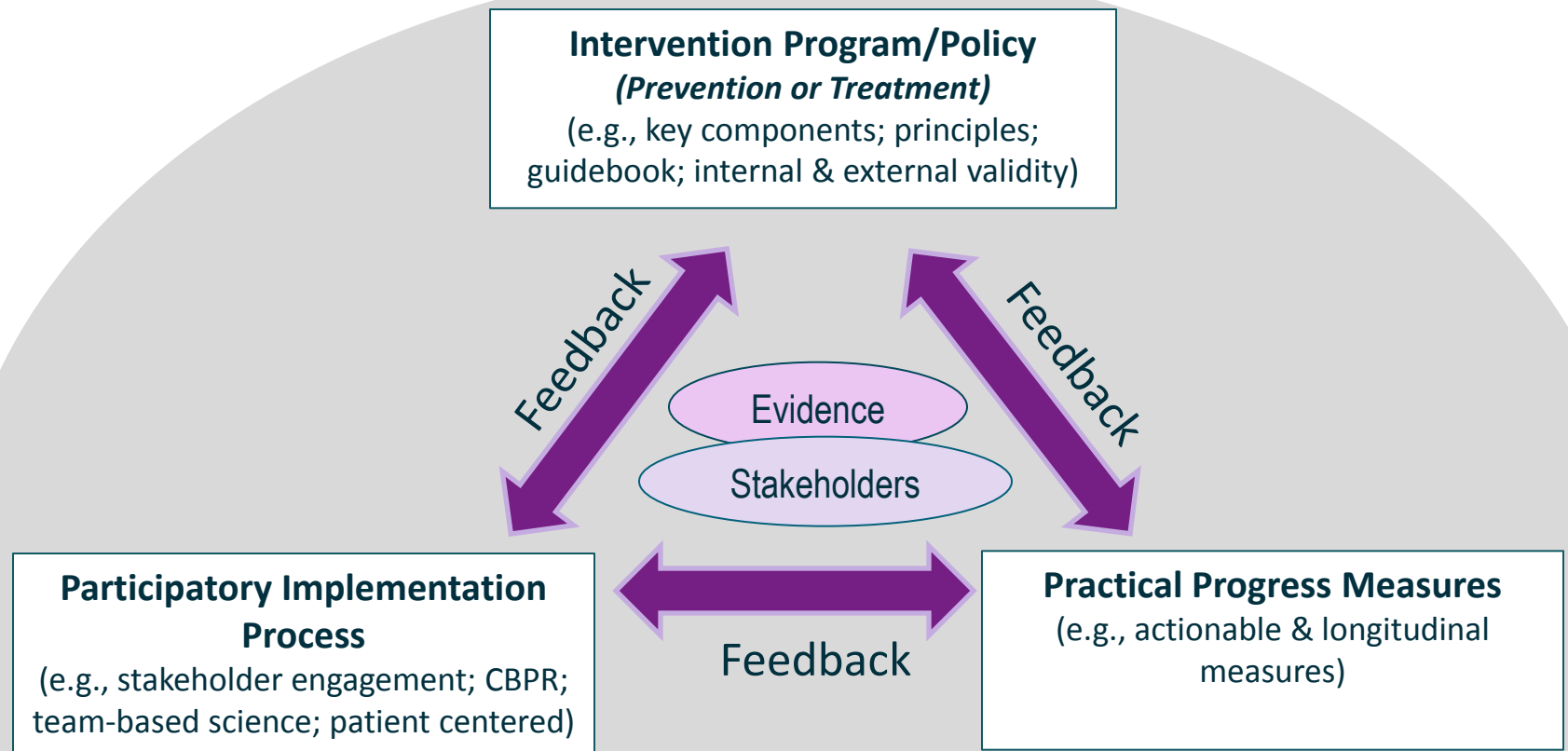
- T0 – T4 – Knowledge Integration Process
- Evidence Integration Triangle
- Primary care - Community

Figure 1. Knowledge Integration Process

T1

Discoveries from multiple disciplines

Promising interventions (tests, drugs, policies, behavioral) efficacy

T0

T2

Population health impact

Integration of basic, clinical & population research

Stakeholder engagement

Mixed methods, modeling & innovative designs

Evidence based recommendations, policies, and Guidelines; effectiveness

T4

T3

Organizational & community systems; Prevention and QI programs

Evidence Integration Triangle (EIT)

Intervention Program/Policy
(Prevention or Treatment)
(e.g., key components; principles;
guidebook; internal & external validity)

Feedback

Feedback

Evidence

Stakeholders

**Participatory Implementation
Process**
(e.g., stakeholder engagement; CBPR;
team-based science; patient centered)

Feedback

Practical Progress Measures
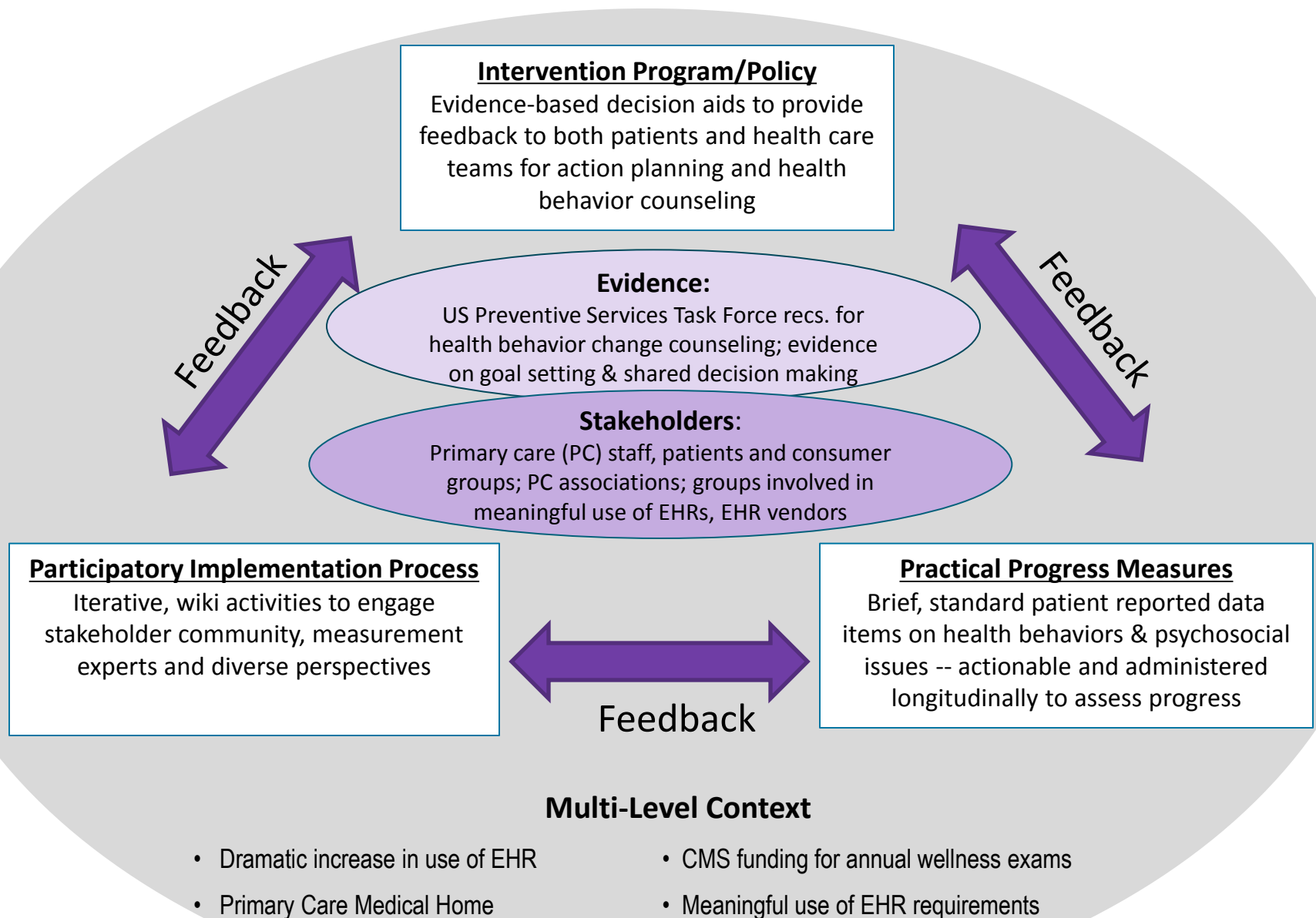(e.g., actionable & longitudinal
measures)

Multi-Level Context

- Intrapersonal/Biological
- Interpersonal/Family
- Organizational

- Policy
- Community/Economic
- Social/Environment/History

Glasgow RE, Green LW, Taylor MV, Stange KC. AJPM (in press, 2012)

EIT Conclusions

- **The evidence-based movement is a good start, but only gets us so far**

- **To make greater progress, two other elements also need attention:**

  - Practical MEASURES to track progress, and

  - Implementation PROCESSES that use partnership principles.

  - These 3 legs of the "EIT" are each necessary but not sufficient by themselves.

http://cancercontrol-dev.cancer.gov/IS/presentations/

Evidence Integration Triangle (EIT) - A Patient-Centered Care Example

Intervention Program/Policy
Evidence-based decision aids to provide feedback to both patients and health care teams for action planning and health behavior counseling

Evidence:
US Preventive Services Task Force recs. for health behavior change counseling; evidence on goal setting & shared decision making

Stakeholders:
Primary care (PC) staff, patients and consumer groups; PC associations; groups involved in meaningful use of EHRs, EHR vendors

Feedback

Feedback

Participatory Implementation Process
Iterative, wiki activities to engage stakeholder community, measurement experts and diverse perspectives

Practical Progress Measures
Brief, standard patient reported data items on health behaviors & psychosocial issues -- actionable and administered longitudinally to assess progress

Feedback

Multi-Level Context

- Dramatic increase in use of EHR
- Primary Care Medical Home

- CMS funding for annual wellness exams
- Meaningful use of EHR requirements

Team Science Project on Patient Reported Measures to Facilitate Patient-Centered Care

- **NCI**
  - Russ Glasgow, Brad Hesse, Kurt Stange, Rick Moser, Martina Taylor

- **OBSSR**
  - Maureen Boyle, Robert Kaplan, Holly Jimison

- **NIMH**
  - David Chambers

- **Harvard School of Public Health/Society of Behavioral Medicine**
  - Karen Emmons

- **University of Vermont**
  - Rodger Kessler

- **Virginia Tech University**
  - Paul Estabrooks

- **Virginia Commonwealth University**
  - Alexander Krist

- **UCLA School of Public Health**
  - Roshan Basani, Hector Rodriquez

Why Collect and Standardize Behavioral and Psychosocial Measures in Primary Care?

- Screening and collection of standard data on behavioral and psychosocial issues will facilitate:
  - Brief interventions in primary care; goals of PCMH
  - Patient-centered shared clinical decision-making
  - Improved patient self-management support
  - Population health management
  - Research
    - Comparative Effectiveness
    - Epidemiology
    - Personalized medicine (through large data sets combining health behavior data with medical and biological information)

Three-Phased Process

National Cancer Institute

Phase1
- Expert panels reviewed existing measures and made recommendations

Phase 2
- Stakeholders used wiki tool (GEM) to provide comments and ratings, suggest alternatives

Phase 3
- Town hall meeting for discussions with range of stakeholders

Participating Organizations

- Office of Behavioral and Social Sciences Research (OBSSR), NIH
- National Cancer Institute (NCI), NIH
- Society of Behavioral Medicine (SBM)
- **American Academy of Family Physicians (AAFP)**
- American College of Sports Medicine (ACSM)
- **Agency for Healthcare Research and Quality (AHRQ)**
- Center for Advancing Health (CFAH)
- **Centers for Medicare & Medicaid Services (CMS)**
- **Consumers Union**
- Geisinger Health System
- Group Health Cooperative
- Health Research Services Administration (HRSA)
- HealthPartners
- **North American Primary Care Research Group (NAPCRG)**
- **National Alliance on Mental Illness (NAMI)**

- **National Committee for Quality Assurance (NCQA)**
- National Heart, Lung, and Blood Institute (NHLBI)
- National Institute of Mental Health (NIMH), NIH
- National Institute of Nursing Research (NINR), NIH
- National Institute on Drug Abuse (NIDA), NIH
- **National Quality Forum (NQF)**
- Preventative Cardiovascular Nurses Association (PCNA)
- **Patient Reported Outcomes Measurement Information System (PROMIS) Network**
- **Robert Wood Johnson Foundation (RWJF)**
- **Society for General Internal Medicine (SGIM**)
- Society of Teachers of Family Medicine (STFM)
- Substance Abuse and Mental Health Services Administration (SAMHSA)
- US Department of Health & Human Services (HHS)
- **US Department of Veterans Affairs (VA)**

Evaluation Criteria

GOLD STANDARD MEASURE RATING CRITERIA - For Primary Research Focus	PRACTICAL MEASURE RATING CRITERIA – For Real World Application [1]
Reliable Especially test-retest (less emphasis on internal consistency)	**Feasible*** Brief (generally 2-5 items or less); easy to administer/score/interpret
Valid Construct validity, criterion validity, performed well in multiple studies	**Important to Practitioners and Stakeholders*** Relevant to health issues that are prevalent, costly, challenging; helpful for decision makers or practice
Broadly Applicable Available in English and Spanish, validated in different cultures and contexts; norms available; no large literacy issues	**Actionable** Based on information collected, realistic actions can be taken, e.g., immediate discussion, referral to evidence-based on-line or community resources
Sensitive to Change* (if applicable) Longitudinal use, for performance tracking over time	**User Friendly** Patient interpretability; face valid; meaningful to clinicians, public health officials, and policy makers
Public Health Relevance Related to Healthy People 2020 goals, key IOM objectives or national priorities	**Low Cost*** Publicly available or very low cost to use, administer, score, and interpret
	Enhances Patient Engagement Having this information is likely to further patient engagement
	Do No Harm Can likely be collected without interfering with relationships, putting respondents at risk, or creating unintended negative consequences

[1] For use in pragmatic studies and real world settings where there are many competing demands, many other measures to assess etc. For pragmatic rating, still consider gold standard criteria, but weight criteria on right most heavily
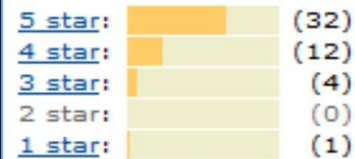
NOTE: For both Gold Standard and Practical Measure Use, give criteria with * heaviest weighting in making your ratings

National Cancer Institute

Amazon.com Customer Review Average:

Customer Reviews
Monster Hunter Tri

49 Reviews

5 star: (32)
4 star: (12)
3 star: (4)
2 star: (0)
1 star: (1)

Average Customer Review
(49 customer reviews)

Share your thoughts with other customers

Create your own review

Grid-Enabled Measures (GEM): Science 2.0

National Cancer Institute

Underlying principles:

• Architecture for participation
• Data driven decisions
• Wisdom of the masses (crowd sourcing)

https://www.gem-beta.org/

Consensus Results

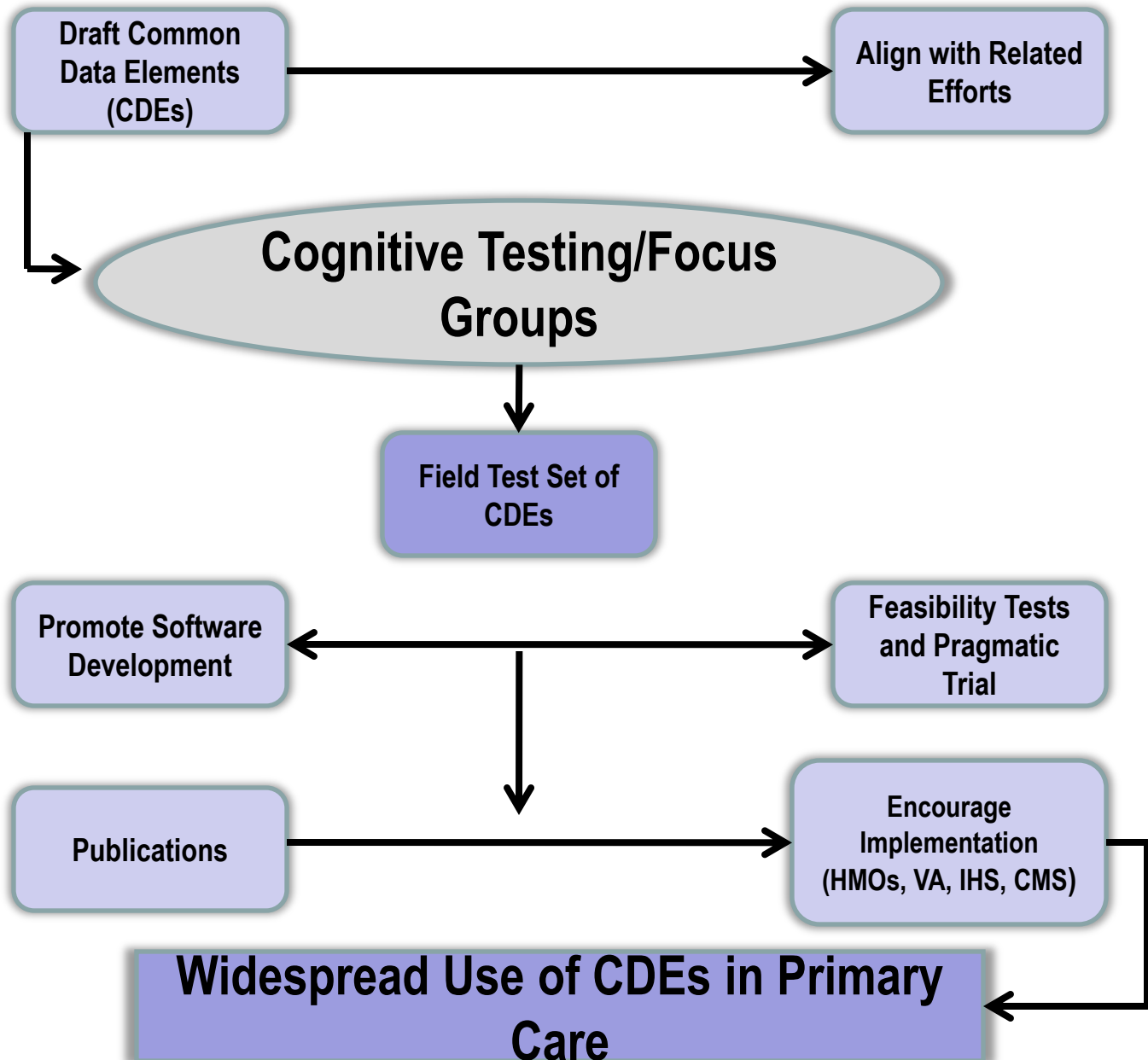- Consensus was reached on Common Data Elements for 9 of the 13 constructs (27 total items)
  - 13 items (collect annually)
  - 1 item (collect at each visit)
  - 7 demographic items (collect at first visit only)
  - 6 demographic items (review annually)
- Additional work needed:
  - Patient goals, Medication Adherence, Health Literacy/Numeracy, Quality of life
  - Several demographic variables
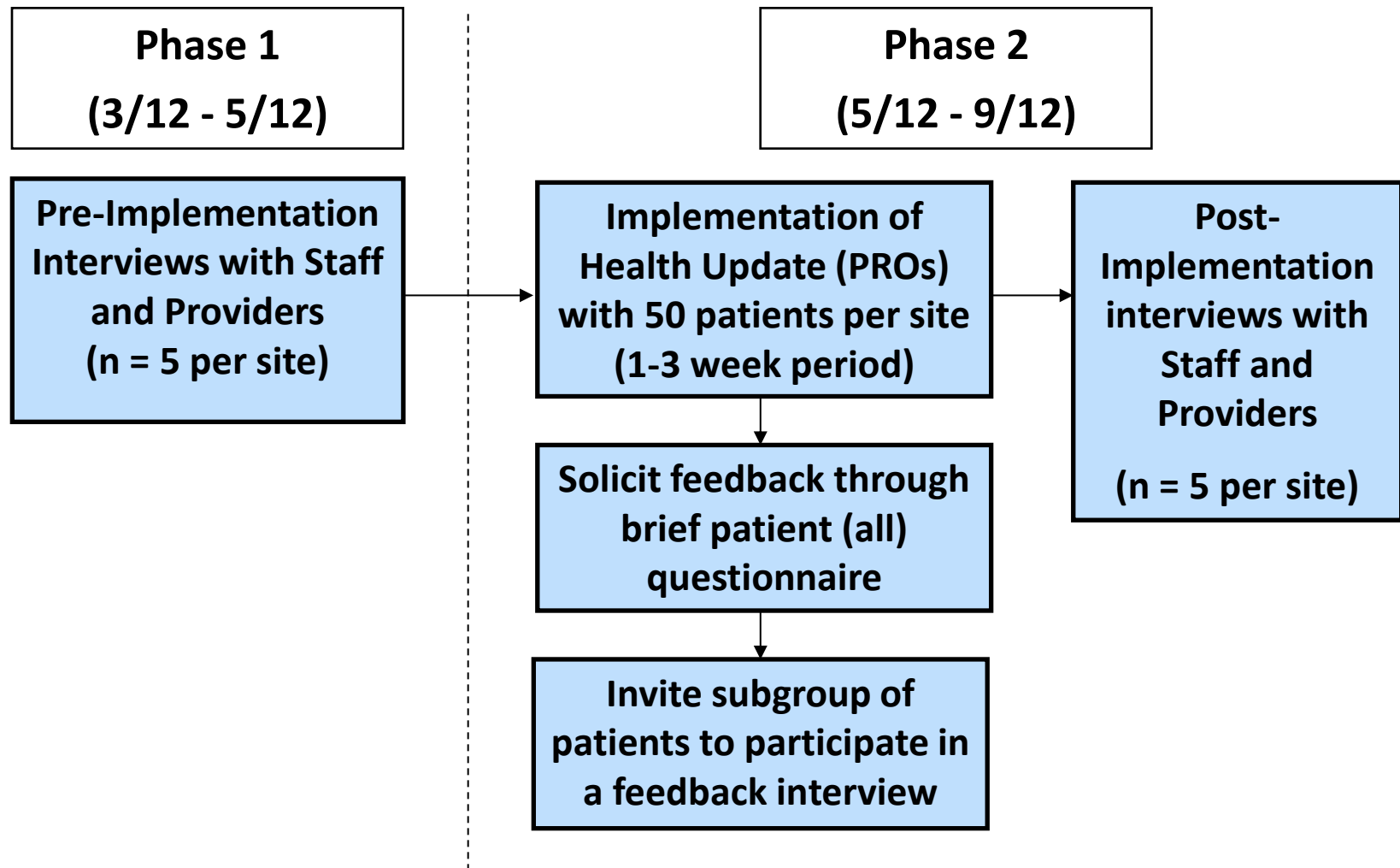
Domains for Patient Reported Survey

Domain	Final Measure (Source)
1.Demographics	9 items: Sex, date of birth, race, ethnicity, English fluency, occupation, household income, marital status, education, address, insurance status, veteran's status. Multiple sources including: Census Bureau, IOM, and *National Health Interview Survey (NHIS)*
2. Overall Health Status	1 item: BRFSS Questionnaire
3. Eating Patterns	3 items: Modified from Starting the Conversation (STC). (Adapted from Paxton, AE et al. *Am J Prev Med,* 2011; 40(1):67-71.)
4. Physical Activity	2 items: The Exercise Vital Sign (Sallis, R. *Br J Sports Med* 2011; 45(6):473–474)
5. Stress	1 item: Distress Thermometer (Roth AJ, et al. *Cancer* 1998; 15(82):1904-1908.)
6. Anxiety and Depression	4 items: Patient Health Questionnaire - Depression & Anxiety (PHQ-4) (Kroenke K, et al. *Psychosomatics* 2009; 50(6):613-621.)
7. Sleep	2 items: a. Adapted from BRFSS b. Neuro-QOL (Item PQSLP04)
8. Smoking/ Tobacco Use	2 items: Tobacco Use Screener *(*Adapted from YRBSS Questionnaire)
9. Risky Drinking	1 item: Alcohol Use Screener (Smith PC, et al. *J Gen Intern Med* 2009; 24(7):783-788)
10. Substance Use	1 item: NIDA Quick Screen (Smith PC, et al. *Arch Intern Med* 2010, 170(13): 1155-1160.)

Next Steps

```
Draft Common Data Elements (CDEs) ──────────────→ Align with Related Efforts
        │
        ↓
  Cognitive Testing/Focus Groups
        │
        ↓
  Field Test Set of CDEs
```

Promote Software Development ←──────────→ Feasibility Tests and Pragmatic Trial

Publications ──────────────→ Encourage Implementation (HMOs, VA, IHS, CMS)

Widespread Use of CDEs in Primary Care

Study Setting: 4 Federally-qualified health centers (FQHCs) in Southern California

National Partners: a number of additional sites located nationally: VA in Bedford, MA; practice-based research network clinics in Vermont and Virginia

| Phase 1 (3/12 - 5/12) | Phase 2 (5/12 - 9/12) |

Phase 1

(3/12 - 5/12)

Phase 2

(5/12 - 9/12)

Pre-Implementation Interviews with Staff and Providers (n = 5 per site)

→

Implementation of Health Update (PROs) with 50 patients per site (1-3 week period)

→

Post-Implementation interviews with Staff and Providers

(n = 5 per site)

↓

Solicit feedback through brief patient (all) questionnaire

↓

Invite subgroup of patients to participate in a feedback interview

Guidance for Providers

Scoring Template
•Annotated clinician version of "PRO measures" indicating out of range values to assist in scoring

Provider Guidance Form
•1 page front & back, help to interpret "PRO" results & guide follow-up assessment/treatment
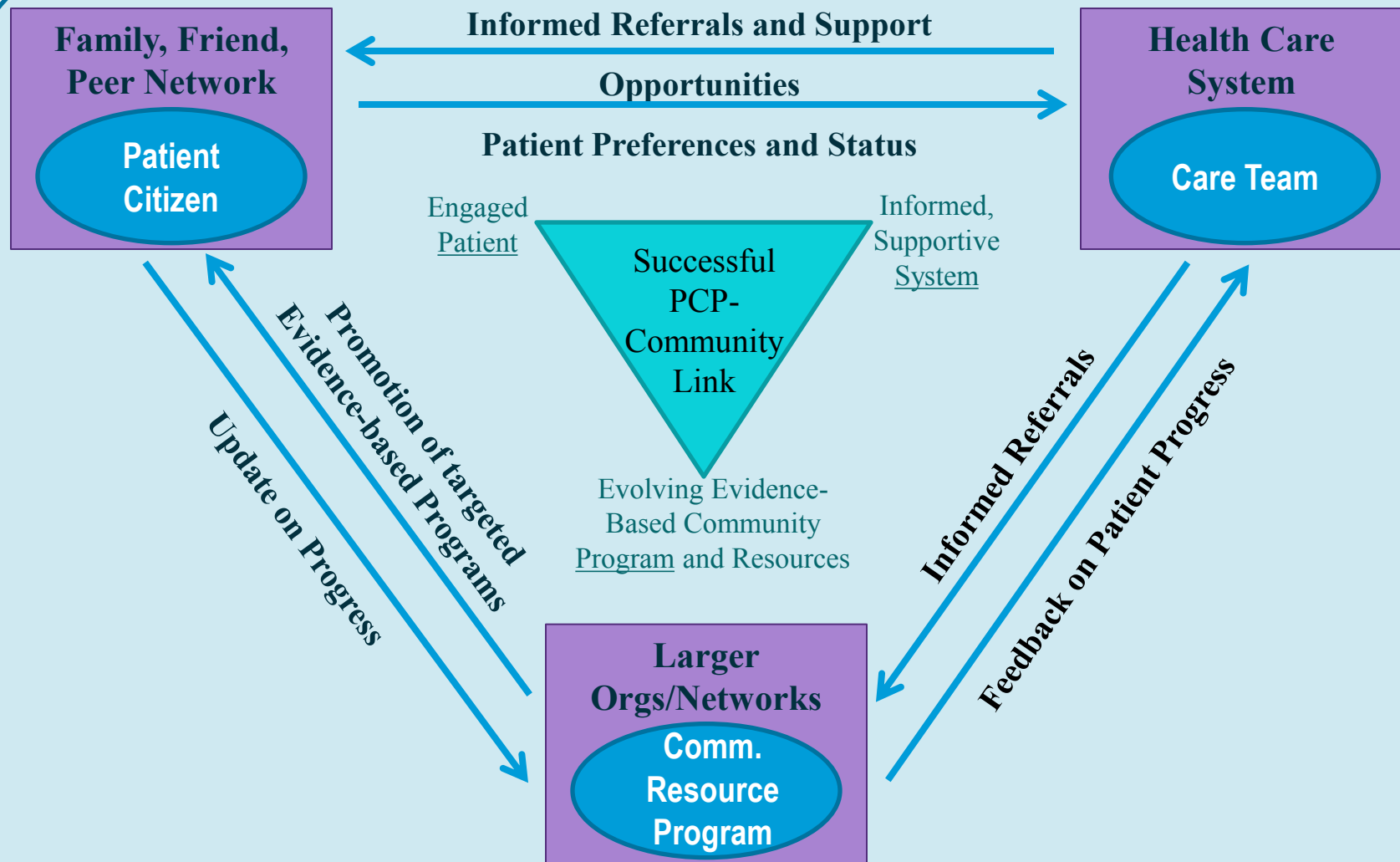

Provider Resource Packet
•Detailed hard copy/electronic resource to summarize evidence for follow-up/treatment, links to available web resources, inclusion of local resources at site discretion

Planned Pragmatic Implementation Trial involving CPCRN

➢ Paired primary care clinics: half FQHCs; half other

- Each clinic recruits 125-150 patients

- Randomized **pragmatic study***- delayed intervention- assess at 0, 4 and 8 months

- Clinics selected to be at different stages of EHR implementation

- Key outcomes include implementation; creation of action plans; patient behaviors and satisfaction

- Being designed collaboratively with CPCRN centers

Thorpe et al, CMAJ, 2009

Linking Patient, Physician, and Community Programs

Family, Friend, Peer Network

Patient Citizen

Informed Referrals and Support

Opportunities

Patient Preferences and Status

Engaged Patient

Informed, Supportive System

Successful PCP-Community Link

Evolving Evidence-Based Community Program and Resources

Health Care System

Care Team

Promotion of targeted Evidence-based Programs

Update on Progress

Informed Referrals

Feedback on Patient Progress

Larger Orgs/Networks

Comm. Resource Program

Broader Multi-Level Context:
(intrapersonal/biological; interpersonal/family; organizational; policy; community/economic; social/environment/historical)

Types of D & I Evidence Needed: 2R's and "RCCT"

- **R**elevant
- **R**igorous and

- **R**apid*
- **C**ost
- **C**onvergent*
- **T**ransparent

Glasgow R, *Annals of Behavioral Medicine, 2008, 35*: 19-25.
Glasgow R, Chambers D. *Clinical and Translational Science*, in press, 2012
http://cancercontrol.cancer.gov/IS/

National Cancer Institute

Contact us:

- **glasgowre@mail.nih.gov**

- **cvinson@mail.nih.gov**

IS Team Website:

- **http://dccps.cancer.gov/is/**