
## GWEP Preconference

# Demonstrating Clinical Value: An Overview and Strategies for Collecting GWEP Outcomes

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# Introduction

- Education grant, but an impressive amount of outcomes data collected
- Connects to the original HRSA RFP and to the IMPAQ survey
- Shows the value of the work to sustain the programs and useful for each GWEP as we think about next round

# Session Goals and Caveats

- Accepted GWEP abstracts reviewed twice for inclusion of outcomes; ≥1 positive identification included. (n=66)
- Emphasis today on outcomes and data sources; intervention descriptions are cursory.
- Some data sources are unclear and data all 6 months out of date.
- Many submissions could be considered in multiple categories.
- Meant to stimulate thought about ways to demonstrate value and secure the data.
- ***Goal: position grantees well for final year of the current award emphasizing outcomes/evaluation***.

# Outline

- The abstracts are broken out into categories and presented as follows:
- Dr. Brennan:
  - Practice Change
    - Advanced Care Planning/Access & Screening
    - Falls/Medication
- Dr. Supiano:
  - Disease Management
  - Health Care Delivery
  - Education
  - Data Source Summary
  - QIO details

# PRACTICE CHANGE ABSTRACTS

## Adv. Care Planning/Pall. Care

**Hopkins:**

- ACP workflow implementation
- Effectiveness of a QI project for ACP

**Baystate:**

- Identification of valid adv. directives
- A PA led goals of care initiative
- Incorporating EOL beds into an ACE

**Rhode Island:**

- Bringing best practices in geriatrics & pall. care

## Access and Screening

**Baystate**

- Community-based habilitation therapy
- An Interdisciplinary geriatrics team in a CHC

**U. South. California/UCLA**

- One stop geriatric assessment clinic

**East Carolina**

- GWEP nurses in action

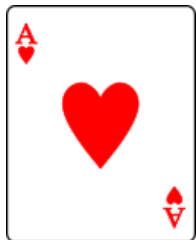
**North Carolina**

- Facilitating practice change


# Adv. Care Planning, *Baystate 1*

ACE EOL beds: No previous designated pall. care beds of any type in hospital.

- Reviewed results of first 9 months.
- Outcomes:
  - Bed occupancy was 85.1%.
  - 83.4% were true “comfort” patients.
  - EOL pts had 75.6% hospital mortality.
- Data: **Hand count** of admission logs for EOL rooms, **Finance Div.** provided diagnoses and mortality rates.




# Adv. Care Planning, *Baystate 2*

Outpatient HCP initiative: At baseline 51% had no valid HCP in chart and 84% lacked MOLST.

- Outcome:
  - Valid ADs for patients rose from 46% to 72%.
- Data: Relied upon **review of EMR**, **prospective data entry** and **EMR checks** to ensure appropriate scanning.


# Adv. Care Planning, *Hopkins*

Designed new process to identify pts/appts for ACP in one practice.

- Outcome:
  - a 134% increase in ACP documentation.
- Data source: 250 **chart reviews** pre and post

Phase 2: Scaling—

- Outcome:
  - HCP/Living wills rose from 11.6% - 27.2%
  - MOLST rose from 3.6 - 44%%
- Data: Cross sectional **review of** 250 **charts** pre and 250 post intervention


# Adv. Care Planning, *Rhode Island*

RI team trained 146 clinicians in geri assessment and ACP.

- Outcomes:
  - Use of ACP billing codes rose from average of 28 monthly to 85/month.
- Data: Secured **pre and post surveys** to demonstrate increased confidence and secured **claims data from ACO** on use of ACP codes.

# Adv. Care Planning, *Baystate 3*


## "Goals" Outcomes: 5/16-9/17

- 874 ACE pts screened with "surprise question".
- 58% (508) screened in.
- 93 (18%) had meeting with geri. PA using Serious Illness Conversation Guide.
- Only 3 declined.

Data: **Prospective collection** of surprise ? In daily rounds; PA **recorded results** of meeting, **Finance** supplied the acute care costs. (5/16-6/17 pt cohort.)

| Pts (n=93) | Pre-GOC | Post-GOC |
|---|---|---|
| HCP in EHR | 70 (75%) | 78 (84%) |
| MOLST (EHR) | 19 (20%) | 54 (58%) |
| CPR shift | | 25 (27%) |
| Change Rx | | 36 (39%) |
| Hospice | | 4 (4%) |
| 3 mths acute care costs | $9,921 | $8,964 |
| New MOLST (n=35) with DNR | | 34 (97%) |

# Access/Screening, *Un. So. CA*

- Instituted half day clinic (8 schools) for geri eval of patients with cog. impairment. (n=34)
- Outcomes:
  - Satisfaction (excellent/good for 7 of 9 measures).
  - Improved confidence and ability to cope.
  - Fewer problems with mobility associated HRQOL.
  - no change in # falls, ED visits or hospitalizations.
- Data: baseline and 6 months **surveys** and **utilization data.** (?hosp. finance dept.)

# Access/Screening, *Baystate*

- SW led habilitation coaching for families caring for patients with dementia.
- Outcomes:
  - Intensive coaching and/or advice/referrals provided to 219 care partners.
  - High levels of caregiver stress on Zarit scores.
- Data: SW **prospectively obtained** Zarit burden scores along with numbers of patients/families served and intensity of intervention.

# Access/Screening, *Baystate*

- Launched Geri-Pal team in CHCs to assess frail elders.
  - Data: **Prospective data collection** at time of team meetings, entry into **REDcap**

| Characteristics | Outcomes (n=420) |
|---|---|
| Age, median | 75 |
| Female gender | 68% |
| People of color | 85% |
| Fell in prior 6 mos | 33% |
| New geri syndrome dx | 100% |
| Cog. impairment | 78% |
| Indep. all IADLs,etc. | 15% |

# Access/Screening, *No. Carolina*

Partnered with AHECs to train, redesign workflow for 4 (now 25) practices re ACP, health literacy and falls (selective).

- Outcomes:
  - ACP and health lit. interventions rose modestly.
  - Falls screening rose from 23% to 70%; falls interventions rose from 0 to 93%.
- Data: **Chart review** and/or **EMR abstraction**

# Access/Screening, *E. Carolina*

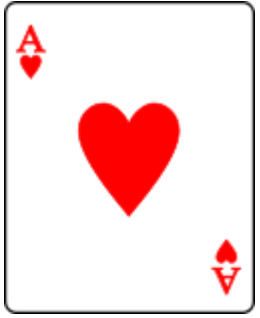
Community-based RN screening for rural elders—one targeting agric. workers and one broader initiative (CDC STEADI tool, Mini-Cog and PHQ2)

- Outcomes:
  - 614 agric. workers and 994 others screened; 13.5% of former and 59% of latter had ≥ 1 positive screen.
  - All educated and referred for help.
  - Attempt to estimate cost avoidance.
- Data: **Data** collection forms **prospectively completed** by RNs and stored at ncoa.org; basis of cost avoidance calculations unclear.

# PRACTICE CHANGE ABSTRACTS

| Falls | Medications |
| --- | --- |
| **No. Carolina**<br>• Evidence-based falls prevention program participant outcomes<br>**Baystate**<br>• Group medical visits for falls prevention<br>**Virg. Commonwealth**<br>• Reduction in falls following an interprofessional …program | **Univ. of Chicago**<br>• Implementation of guided prescribing CPOE Changes<br>**Baystate**<br>• ACE program lowers new antipsychotic prescription<br>• A QI initiative to improve prescribing on ACE |

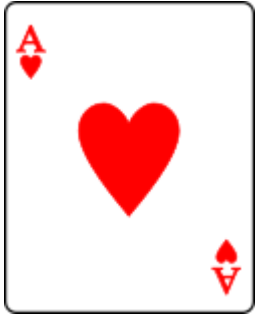
# Medications, *Baystate*



Incorporated a pharmacist into an ACE pilot program.

- Outcomes:
  - Median number of recommendations rose from 1 to 2.
  - In “post” period more recommendations made for analgesics and to reduce PIMs and APs.
  - Clinician acceptance rates were stable around 85%.
- Data: **Prospective pharmacy tracking** of number and types of recommendations and clinician acceptance rates-6 months prior and 12 months after ACE launch.

# Medications, *Baystate*



Analysis to see if ACE program lowered rates of newly prescribed antipsychotics.

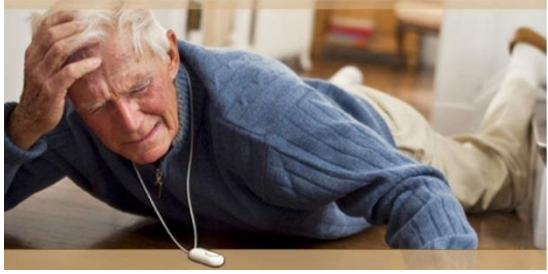
- Outcomes:
  - New APs prescribed for 3.2% of ACE pts and for 6.2% patients on control floor.
  - Similar drugs used.
  - Dosing and multiple APs more frequent on ACE.
- Data: New APs **recorded prospectively** during ACE rounds, **pharmacy reports** quantified drugs and doses, **chart reviews** for control patients to determine if drugs were "new" or home meds.

# Medications, *Chicago*

Instituted CPOE prompts/decision support for geriatric drug selection/dosing for 14 meds.

- Outcomes: 82.5% compliance rose to 85.3% (p=.04)
- Data: Pre and post compliance with recommendations based on **EMR abstraction** and a **data warehouse query.**

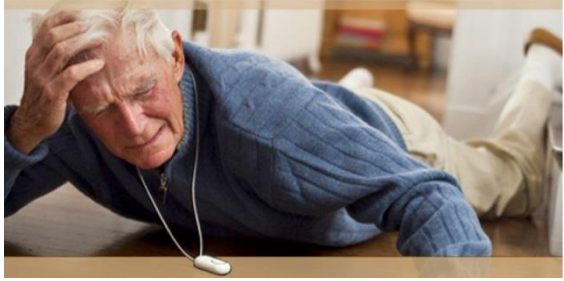

# Falls, *Baystate*



Designed group visit based on STEADI for CHC patients who had fallen. (n=39)

- Outcomes:
  - Many gaps: 53% no Vit. D, 62% no DEXA, etc.
  - Care plans completed for 74% of patients.
  - Recommendations for med changes (ave. # meds =15) and referrals most frequent.
- Data: Identified patients through **EMR query**, invited patients and **reviewed records** to define gaps in care.

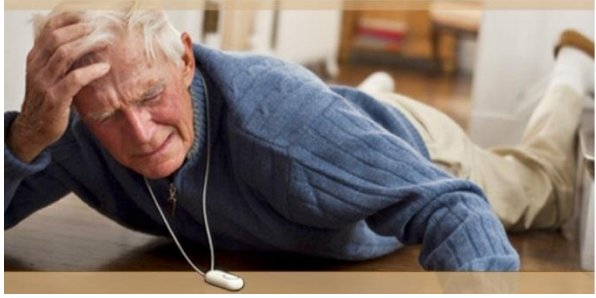
# Falls, *N. Carolina*



Assess evidence-based falls prevention programs by 39 organizations (GWEP was one) with federal grants ('14-'17).

- Outcomes: 46,000 older adults (and demo. data). After program participation:
  - 16% reported fewer falls.
  - 41% felt more steady.
  - 33% reported a decrease in fear of falling.
- Data: participants completed **data collection forms** and grantees logged **de-identified data in a national database.**


# Falls, Virg. Commonwealth



Curriculum for interprofessional falls assessment trained 22 clinicians including PACE team.

- Outcomes:
  - 51% of total falls were in “pre” period; this declined to 27.3% and 21.9% in subsequent quarters.
  - Injurious falls declined as well (46.8%, 30.6%, 22.6%).
- Data: Used **surveys** and **focus groups** to assess practice change. Number and severity of falls **abstracted from quarterly PACE Monitoring Reports** (3 months prior to and 6 months after program).

# PRACTICE CHANGE ABSTRACTS

## Education

**Univ. of Chicago**

- Identifying and addressing geriatrics-preparedness gaps

**Duke**

- Geriatric resource team training

**Indiana**

- Integrating community resources for older adults into PC

**Univ. Wyoming**

- UW ECHO in geriatrics

**Yale**

- IM resident practice change

## NH Care

**Lake Erie**

- LECOM Senior Living Center UA protocol
- Hypernatremic dehydration

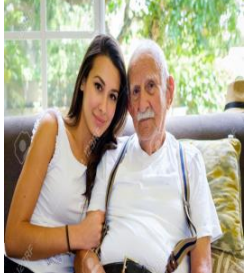
**Univ. of Utah**

- INTERACT training

**Univ. of Hawaii**

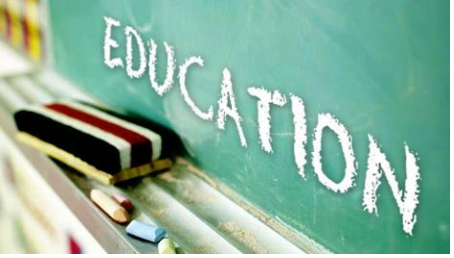
- Development and Evaluation of a QAPI curriculum using INTERACT


# Education, *Chicago*



Tele-mentoring program for PCPs via 12 case conferences with total of 107 PC clinicians.

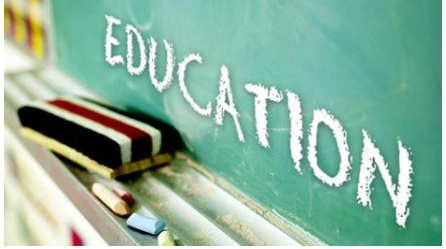
- Outcomes:
  - Stat. signif. rise in self-efficacy.
  - Increases in freq. (self-report) of geri practices such as falls screening.
- Data: **pre and post surveys and qual. analysis** of recorded sessions.



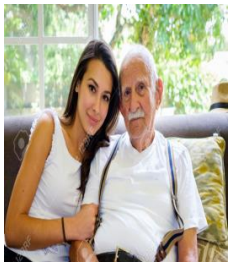

# Education, *Duke*

Recruited primary care clinicians from 4 practices; formed Geri. Resource Teams focused on geri best practice, community resources and QI tools/methods.

- Outcomes:
  - Trend for improved knowledge.
  - High satisfaction with training.
  - All QI projects completed.
- Data: **Pre/post surveys**- perception of team, self-efficacy, knowledge; **participation levels**; **QI project evaluation.**

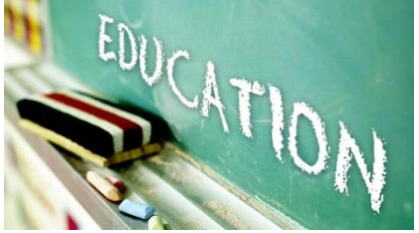



# Education, *Wyoming*

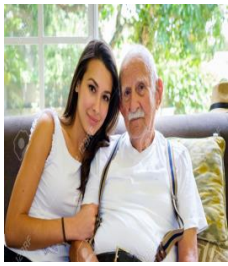


Echo project with 299 clinician learners in 5 states and a hub interprofessional team. (Cases and didactics 2X monthly.)

- Outcomes:
  - 63% reported they would take better care of patients and intended to change practice. (communication/education of patients & families)
- Data: post-session **surveys** (online and paper).

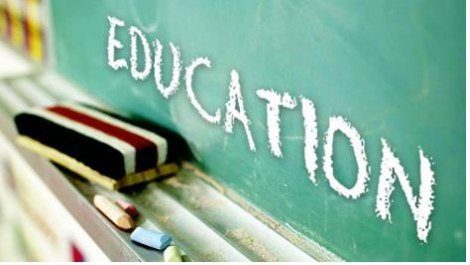



# Education, *Yale*



Sessions on med. management (interns, n=39) and GOC (114 IM residents) given to trainees.

- Outcomes:
  - Approx. 90% completed initial surveys and committed to practice change.
  - 6 months later 45-50% completed surveys and ≥ 80% reported making changes in practice.
- Data: Post session **surveys** and 6 month follow up surveys.




# Education, *Indiana*

Following a focus group needs assessment, 3 sessions taught 316 PC clinicians about 4 community agencies (services, how to refer, etc.)

- Outcomes:
  - Self-reports of increased knowledge and skills.
  - New referrals for 4 programs increased 500%.

Data: **post-training surveys** and **rates of practice referrals** to community agencies.

# NH, *Lake Erie 2*

Implemented protocol to decrease hypernatremia/dehydration in new NH.

Outcomes: 3 patients (2.2%) became hypernatremic over 8-9 month period.

Data: No baseline; compared rates to those in literature. **Reviewed EMR** to check on results of Na levels.

# NH, *Lake Erie*

- Launched protocol using McGeer Criteria to identify and diagnose UTIs in new LTC facility.
- Outcomes:
  - Rate of uas sent for analysis and rate of UTI diagnosis adjusted for census.
  - Uas sent dropped by 38%; dxed UTIs by 40% (signif.)
- Data: All samples sent to one lab. **Hospital lab ran report.**

# NH, *Hawaii*

Initial group of fellows/NH staff (2 Honolulu NHs) trained in INTERACT—rolled out through in-services (n=128) stressing SBAR (and more.)

- Outcomes:
  - Knowledge and competency scores rose.
  - SBAR use rose monthly from a baseline of 26.2% to 47.5%, 59.0% and 61.1%.
- Data: **prospective collection** of weekend on-call logs by fellows re SBAR use, **pre/post tests.**

# NH, *Utah*

Used INTERACT tool focusing on decreasing potentially preventable ADEs via structured reports and group meetings.

- Outcomes:
  - Baseline= 31% med reviews had pADEs identified.
  - Rate declined to 19% over 20 months. ($p<.001$)
- Data: **online reporting** of de-identified pADEs using **INTERACT tool**.

# Quick Recap

## Data Sources

- Chart reviews and abstractions
- EMR queries/reports
- Prospective data collection (Excel, tally sheets, REDcap, INTERACT tool, Gov't databases, e.g. NCOA)
- Hospital financial database
- ACO claims data
- Billing codes
- Pharm. reports of meds ordered/administered
- Focus groups
- QI project evaluation
- Qualitative analysis of educ. session transcripts
- Quarterly PACE reports
- Laboratory usage over time
- Surveys of clinicians or patients/caregivers (pre-post, post, 6 month follow up, reports of change, satisfaction)
- Community partner referrals

## Outcomes

- Hosp. costs (pre-post, vs controls)
- +ve screening tests/new diagnoses
- Access rates for community services
- Participation rates in educ. activities
- ACP rates
- Bed utilization rate
- Mortality rate in acute care
- Demographics and diagnoses documenting need
- Degree of caregiver burden
- Increased use of community agencies
- Improved access to "gold standard' care—falls evals, team based assessment, counseling for families of pts with dementia, etc.
- Improved HRQOL (ambulation)
- Improved dx and treatment of UTIs
- Improved hydration of NH pts
- Lower rates of pADEs

# Disease Management Outcomes – 1

| Title | Site | Data Sources |
|---|---|---|
| A rural delta experience: The impact of geriatric training on outcomes | University of Arkansas | • Diabetic Empowerment Education Program<br>• A1C – EHR<br>• Pre/Post - QIO |
| Evaluation of HOPE: A workshop for Hoarding Disorder | University of Arizona | • Surveys |
| Hospital Complications in Elderly Patients Seeking Elective Surgery | University of Arizona | • EHR |
| Decreasing Falls Through Integration of Healthcare and Community Based Providers | Summa Health | • EHR<br>• Surveys<br>• Patient interviews |

# Disease Management Outcomes – 2

| Title | Site | Data Sources |
|---|---|---|
| Medication outcomes in an Interprofessional Falls Risk Reduction Clinic | Summa Health | • EHR<br>• Surveys<br>• Patient interviews |
| Assessing the Outcomes of a Chronic Disease Self-Management Program | University of Rhode Island | • Tools for Healthy Living<br>• Surveys of nutrition and physical activity change |
| Fall Prevention Education for Providers | Memorial | • Survey |
| Antihypertensive regimens following hospitalization | University of California, San Francisco | • VA EHR/ Data Warehouse |
| Diabetes medications following hospitalization | University of California, San Francisco | • VA EHR/ Data Warehouse |

# Health Care Delivery Outcomes

| Title | Site | Data Sources |
|---|---|---|
| Nutritional Risk and Post-Operative Outcomes in Elderly Surgical Patients | University of Arizona | • EHR<br>• Data Warehouse / RedCap |
| Palliative Care in Geriatrics Workforce | Baystate Health | • National GWEP Survey |
| Acute Care for the Elderly: The Impact of Scaling | Baystate Health | • Financial / claims<br>• EHR |
| Geriatric Model to Provide Primary Care to Patients with Chronic Disease | Summa Health | • EHR |
| Implementation of Annual Wellness Visits in Primary Care Practices | Rowan University | • EHR/ Chart review<br>• Claims<br>• Survey |

# Educational Outcomes

- 16 submitted abstracts
- Many focus on interprofessional educational objectives
- Opportunity to tie educational intervention to patient level outcomes if linked with a QI program
- Collecting patient level outcome data may be challenging

# Making cognitive decision support work: Facilitating adoption, knowledge and behavior change through QI

- 'Advancing Geriatric Education through Quality Improvement – AGE QI
- 6-month, QI based, intervention:
  - (1) 2 h didactic session, (2) 1 h QI planning session, (3) computerized decision support design and implementation, (4) QI facilitation activities, (5) outcome feedback, and (6) 20 h of CME.
- Weir, J Biomed Inform, 2016

# QI Project Examples

| QI Topic | Data Source |
| --- | --- |
| Fall risk | • EPIC Clinical Reminder with order set |
| Advance Care Planning | • Track ACP visits/completion |
| Immunizations | • EHR report |
| Polypharmacy | • Beers list meds<br>• Total medication count |
| Cognitive screening | • Part of Medicare Annual Wellness Visit<br>• EPIC doc flowsheet for mini-cog |

# Educational Topic Areas

- Caregiver support and teaching older adults
- Interprofessional education / care conferences
- Cognitive screening training
- Communication skills training
- Care transitions

# Educational Outcomes – Caregiver/Patient Education

| Title | Site |
| --- | --- |
| Dementia Support Group within a Community Health Center | Baystate Health |
| Benefits of a Senior Learning Project | Florida State University |

# Educational Outcomes – IPE and Care Conferences - 1

| Title | Site |
|---|---|
| Enhancing Interprofessional Team Conferences in Community Health Centers with Geriatric Resources | Indiana University |
| Strengths Model in IP Team Training to Improve Geriatric Care | Brown University |
| Primary Care at Home for Internal Medicine Resident Training in Geriatrics | Brown University |
| Support of Quality Improvement Projects in Primary Care Residencies | University of Washington |
| Interactive Distance IPE in Post-Acute & Long-Term Care | University of Utah |

# Educational Outcomes – IPE and Care Conferences – 2

| Title | Site |
|---|---|
| "Five Keys to Older Adult Health" Curriculum in Primary Care | University of California San Francisco |
| An Online Interprofessional Education and Collaboration Practice Program | University of Illinois, Chicago |
| Building Primary Care Trainee Awareness of the Aging Services Network | University of Washington |
| Geriatrics Case Presentation on Medicine Residents Patient Care | Montefiore Medical Center |
| Meeting the Nursing Needs: An IP Team Education Approach to Enhance Care for Older Adults | Memorial Sloan Kettering Cancer Center |

# Educational Outcomes – Cognitive Screening

| | |
|---|---|
| Novel Dementia Screening Pathway in Alzheimer's Disease and Related Dementias (ADRD) | Albert Einstein College of Medicine |
| Promote Knowledge of Cognitive Impairment in Minority Older Communities, Caregivers, and Clinicians | Memorial Sloan Kettering Cancer Center |

# Educational Outcomes – Other

| Communication Skills | |
|---|---|
| Title | Site |
| Geriatric Communication Skills Training for Clinicians to Improve the Care of Older Cancer Patients | Memorial Sloan Kettering Cancer Center |

| Care Transitions | |
|---|---|
| Title | Site |
| System-focused ECHO® Network to Improve Rural and Frontier Care Transitions | University of Wyoming |

# Data Sources - Summary

- EHR
  - Enterprise Data Warehouse
  - VA Informatics and Computing Infrastructure (VINCI)
  - www.hsrd.research.va.gov/for_researchers/vinci/
- Surveys – Research Electronic Data Capture (REDCap) https://projectredcap.org/
  - Pre/post; patient interviews
- Financial/ Claims Data/ ACO
  - Patient registries, e.g. EPIC Health Planet
- Quality Improvement Organization

# Quality Improvement Organizations

- Courtesy of Paul Mulhausen, MD

# The Medicare Quality Improvement Organizations

- The Quality Improvement Organization (QIO) Program is authorized by Title XI Part B and Title XVIII of the Social Security Act (the Act)
- Beneficiary and Family Centered Care (BFCC)-QIOs
- Quality Innovation Network (QIN)-QIOs

# The QIO Program's Approach to Clinical Quality

## Aims


**Foundational Principles:**

- Enable innovation
- Foster learning organizations
- Eliminate disparities
- Strengthen infrastructure and data systems

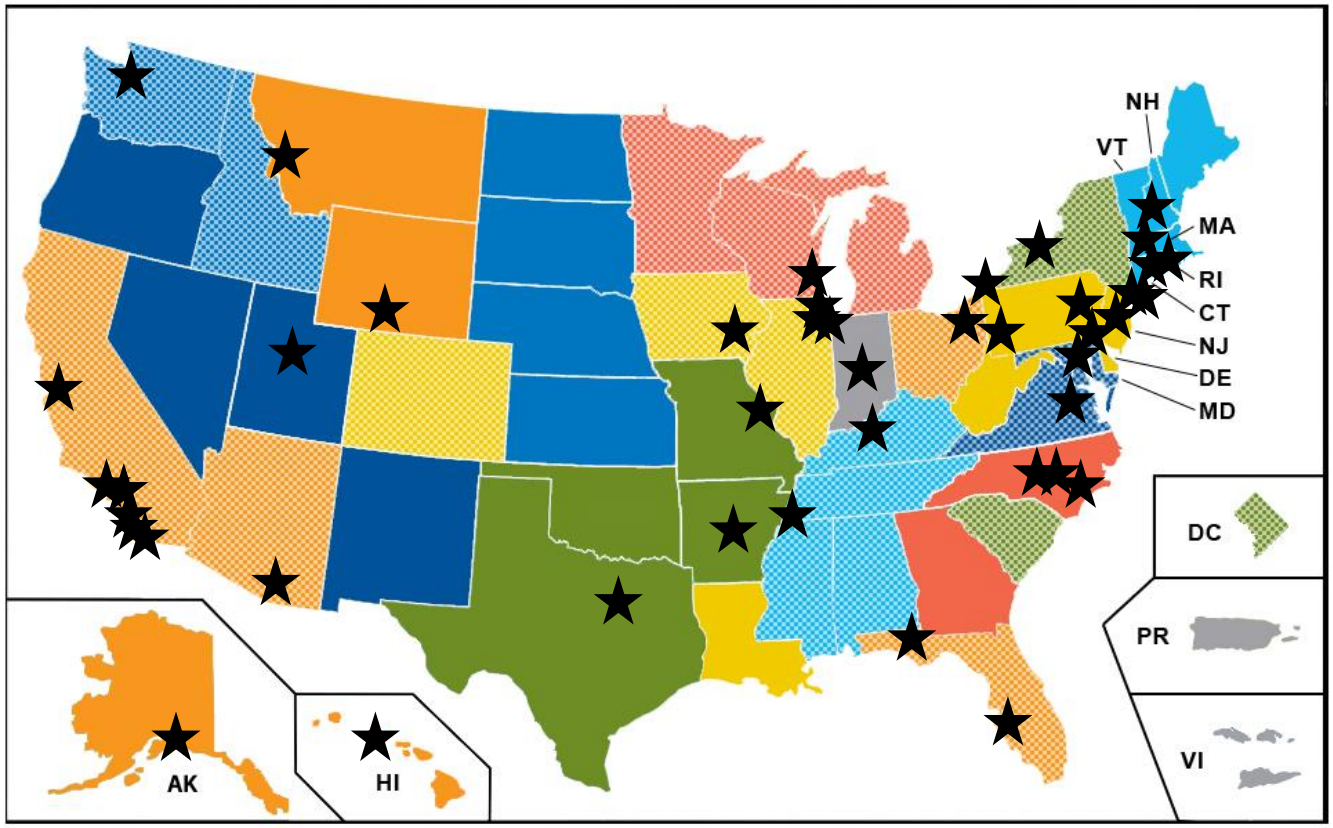
## Goals

- **Make care safer**
- **Strengthen person and family engagement**
- **Promote effective communication and coordination of care**
- **Promote effective prevention and treatment**
- **Promote best practices for healthy living**
- **Make care affordable**

# Quality Innovation Network (QIN) QIOs – What do they Do?

- Four key roles permeate all QIN work:
- Champion local-level, results-oriented change
  - Active engagement of patients and other partners
  - Proactive, intentional innovation and spread of best practices that "stick"
- Facilitate learning and action networks
  - Creating an "all teach, all learn" environment
- Teach and advise as technical experts
  - Consultation and education
- Communicate effectively
  - Optimal learning, patient activation, and sustained behavior change

# GWEPs and QIN-QIO Map




- Alliant - Georgia Medical Care Foundation
- Atlantic Quality Improvement Network
- atom Alliance
- Great Plains Quality Innovation Network
- HealthCentric Advisors
- HealthInsight
- Health Services Advisory Group
- Lake Superior Quality Innovation Network
- Mountain Pacific Quality Health Foundation
- Qualis Health
- Quality Insights Quality Innovation Network
- Telligen
- TMF
- VHQC

**Indiana, Puerto Rico and Virgin Islands awards have not yet been determined.*

# Current Tasks in 11th SOW

(List is not exhaustive)

| Better Health | Better Care | Smarter Spending |
|---|---|---|
| Improving Cardiac Care and Reducing Cardiac Disparities through the ABCS | Reducing Healthcare-Acquired Conditions in Nursing Homes | Reporting Quality Data to Improve Care by providing TA for QPP |
| Reducing Disparities in Diabetes Care through DMSE | Support for establishing antimicrobial stewardship programs | Assessment Support for the Transforming Clinical Practice Initiative |
| Improving identification of depression and alcohol use disorders | Coordinating communities of care to reduce readmissions & adverse drug events | |
| Improving Immunization Rates | | |

# Additional Considerations for GWEPs

- Special Innovation Projects
- Beneficiary and Family Engagement
- Quality Improvement Data
  - Aggregate Rates of Limited Outcomes
  - Readmissions
  - Admissions
  - Utilization – Part A, Part B, Part D
- Learning and Action Networks
- Quality Assurance and Performance Improvement

# Other potential partners

- Hospital Improvement Innovation Networks
- Regional Healthcare Collaboratives
- State Departments of Public Health
- Medicaid State Innovation Models

# Summary and Conclusions

- GWEPs have successfully captured patient level outcomes
- Several sources of patient level data are available to permit GWEPs to expand patient outcome reporting
- Since funding support to accomplish the patient outcome reporting agenda is limited, sites need to plan ahead and leverage assistance from their partners and health systems to obtain patient outcome data