Improving the Health Status of Your Community

Presented & Moderated by:
Charisse Coloumbe, Vice President, Clinical Quality
Health Research & Education Trust
American Hospital Association

Panelists:
Amy E. Guilfoil-Dumont, MSN, RN, CCRN, FACHE
Chief Clinical Officer / Vice President, Patient Care Services
Frisbie Memorial Hospital

Susan Ruka, RN, PhD, Director, Population Health
Memorial Hospital

Andrew Tremblay, MD, Chair, Primary Care
Cheshire Medical Center / Dartmouth-Hitchcock Keene
ADVANCING TOTAL POPULATION HEALTH

IMPROVING THE HEALTH STATUS OF YOUR COMMUNITY

Charisse Coulombe, MS, MBA, CPHQ, Vice President, Clinical Quality Health Research & Educational Trust (HRET)
Objectives

1. Overview of the Partnership for Patients project results
2. Review the contribution of the PfP and HRET HEN has made to population health
3. Discuss the key levers that are being pulled to improve patient safety
4. Summarize the keys to success in this and all quality improvement project
5. Highlight three NH hospital driven population health initiatives
PARTNERSHIP FOR PATIENTS (PFP) MODEL TEST
Focused On Two Breakthrough Aims Starting in December 2011

GOALS:

40% Reduction in Preventable Hospital-Acquired Conditions
1.8 Million Fewer Injuries | 60,000 Lives Saved

20% Reduction in 30-Day Readmissions
1.6 Million Patients Recover without Readmission

No patient wants a hospital that is good at preventing only 2 or 3 forms of harm.

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NATIONAL RESULTS ON PATIENT SAFETY
CONGRATULATIONS!
SUBSTANTIAL PROGRESS THRU 2014, COMPARED TO 2010 BASELINE

- 17 percent reduction in overall harm; 39 percent reduction in preventable harm
- 87,000 lives saved
- $19.8B in cost savings from harm avoided
- 2.1M fewer harms over 4 years

Results are a cumulative effort but have been spurred in part by Medicare payment incentives and catalyzed by the Partnership for Patients (PfP) initiative.

MEDICARE FFS 30-DAY ALL-CAUSE READMISSIONS (MEDICARE CLAIMS)
MEDICARE FFS 30-DAY ALL-CAUSE READMISSIONS (MEDICARE CLAIMS)

- FFS Rate decreased 5.56 percent between calendar year 2010 and Q4 2014.
- AHRQ All-Payer All-Cause 30-Day Readmissions declined 2.6 percent from 2010 to 2013.

Source: Medicare claims data provided by the Health Policy and Data Analysis Group in the Office of Enterprise Management at CMS. The Evaluation Contractor processed and ran regression-adjusted analysis to control for changing demographics independently, with similar findings.

Note: Center line and control limits (U chart) for the first phase were calculated with data between January 2009 and March 2010. Center line and control limits (U chart) for the second phase were calculated with data between January 2012 and March 2013. The dashed green line is the center line; the dashed red lines are the upper and lower control limits; the closest dotted lines above and below the center line are the one-sigma limits; and the dotted lines just inside the control limits are the two-sigma limits. Data include between 981,065 and 754,486 discharges per month.
WHAT IS CAUSING THESE NATIONAL RESULTS?

- Levers being pulled:
  - Meaningful Aims Everyone Can Achieve: *Aims Create Systems; Systems Create Results*
  - Quality Improvement Work on National Scale: Partnership for Patients, HENs, Transforming Clinical Practice Initiative, QIO Program, Community Based Care Transitions Program, more
  - Payment Changes: Penalties, Incentives, New Types of Payments, Payment Goals
  - Innovative Model Projects across the Nation
  - Individual and Hospital commitments and decisions to improve the quality of care from leaders (like those in this room!)

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# AHA/HRET Original HEN Results:
## Total Harms Prevented and Costs Savings

<table>
<thead>
<tr>
<th>Topic</th>
<th>Estimated Harms Prevented</th>
<th>Estimated Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE</td>
<td>8,155</td>
<td>$24,465,000</td>
</tr>
<tr>
<td>CAUTI</td>
<td>2,805</td>
<td>$2,805,000</td>
</tr>
<tr>
<td>CLABSI</td>
<td>893</td>
<td>$15,181,000</td>
</tr>
<tr>
<td>EED</td>
<td>992 (NICU Admissions)</td>
<td>$7,811,000</td>
</tr>
<tr>
<td>Falls</td>
<td>1,331</td>
<td>$882,000</td>
</tr>
<tr>
<td>OB Harm</td>
<td>756</td>
<td>$705,000</td>
</tr>
<tr>
<td>Pressure Ulcers</td>
<td>4,655</td>
<td>$188,528,000</td>
</tr>
<tr>
<td>Readmissions</td>
<td>65,022</td>
<td>$572,714,000</td>
</tr>
<tr>
<td>SSI</td>
<td>4,860</td>
<td>$102,060,000</td>
</tr>
<tr>
<td>VAE/VAP</td>
<td>58</td>
<td>$1,218,000</td>
</tr>
<tr>
<td>VTE</td>
<td>3,255</td>
<td>$72,391,200</td>
</tr>
<tr>
<td>TOTAL</td>
<td>92,792</td>
<td>$988,760,000</td>
</tr>
</tbody>
</table>

**Data Source:**
Comprehensive Data System (CDS) (1/18/14); Data covers January 2012 through November 2014. Cost reference sources listed in PEC April 2014 Formative Feedback report appendices.  
1 Harms prevented calculated at hospital level and then aggregated to HEN level (hospital compared to own baseline). Harm calculated only with months that have sufficient n (85 percent of hospitals reporting at baseline). Hospitals omitting months of data were determined to be negligible at HEN level.
AHA/HRET HEN 2 RESULTS:
TOTAL HARMS PREVENTED AND COSTS SAVINGS

<table>
<thead>
<tr>
<th>Topic</th>
<th>YTD Harms Prevented</th>
<th>Cost/Harm$^5$</th>
<th>YTD Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADE$^1$</td>
<td>15,611</td>
<td>$5,000</td>
<td>$78,054,063</td>
</tr>
<tr>
<td>CAUTI</td>
<td>505</td>
<td>$1,000</td>
<td>$505,078</td>
</tr>
<tr>
<td>CLABSI</td>
<td>439</td>
<td>$17,000</td>
<td>$7,469,333</td>
</tr>
<tr>
<td>EED</td>
<td>1,151</td>
<td>$9,732</td>
<td>$11,240,529</td>
</tr>
<tr>
<td>Falls</td>
<td>1,409</td>
<td>$12,965</td>
<td>$18,265,363</td>
</tr>
<tr>
<td>OB Harm$^2$</td>
<td>4,336</td>
<td>$114 (with instrument) $197 (without instrument)</td>
<td>$753,627</td>
</tr>
<tr>
<td>Pressure Ulcers</td>
<td>1,122</td>
<td>$17,000</td>
<td>$19,077,915</td>
</tr>
<tr>
<td>Readmissions</td>
<td>8,040</td>
<td>$15,477</td>
<td>$124,440,097</td>
</tr>
<tr>
<td>SSI$^3$</td>
<td>792</td>
<td>$21,000</td>
<td>$16,630,883</td>
</tr>
<tr>
<td>VAE$^4$</td>
<td>278</td>
<td>$21,000</td>
<td>$5,832,649</td>
</tr>
<tr>
<td>VTE</td>
<td>738</td>
<td>$8,000</td>
<td>$5,901,515</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>34,422</strong></td>
<td>---</td>
<td><strong>$288,171,052</strong></td>
</tr>
</tbody>
</table>

**NOTE:** TOTALS MAY NOT MATCH SUM OF INDIVIDUAL TOPICS DUE TO ROUNDING
1 Represents total harms and cost savings for all events reported (hypoglycemia, anticoagulation, and opioid adverse drug events)
2 Represents total harms and cost savings for obstetrical trauma for vaginal deliveries with instrument, and obstetrical trauma for vaginal deliveries without instrument.
3 Represents total harms and cost savings for all procedures reported (colon surgeries, abdominal hysterectomies, total hip replacement, and total knee replacement)
4 Represents total harms and cost savings for infection-related ventilator-associated conditions.
5 Costs per harm as provided by the Evaluation Contractor, July 21 2016, “PfPEC_CostSavings_ROI_Summary_20160720.pdf”
READMISSIONS PROGRESS IN HEN 2
FALLS PROGRESS IN HEN 2
PRESSURE ULCER (RATE) PROGRESS IN HEN 2
PERSON & FAMILY ENGAGEMENT

• Focused on finding best practices to assist hospitals (e.g., bedside huddles with patient participation vs. having a conversation near the patient bed)

• Looked for implementation tips and resources vs philosophical discussions
PFE: BASELINE THROUGH Q3 – AHA/HRET

<table>
<thead>
<tr>
<th></th>
<th>Planning checklist</th>
<th>Huddles and bedside reporting</th>
<th>Dedicated PFE staff</th>
<th>Active PFE committee</th>
<th>Patients on boards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>31%</td>
<td>67%</td>
<td>41%</td>
<td>41%</td>
<td>32%</td>
</tr>
<tr>
<td>Quarter 1 (Dec '15 - Feb '16)</td>
<td>34%</td>
<td>70%</td>
<td>46%</td>
<td>44%</td>
<td>36%</td>
</tr>
<tr>
<td>Quarter 2 (Mar - May '16)</td>
<td>36%</td>
<td>71%</td>
<td>49%</td>
<td>45%</td>
<td>39%</td>
</tr>
<tr>
<td>Quarter 3 (End of Jul '16)</td>
<td>39%</td>
<td>72%</td>
<td>52%</td>
<td>47%</td>
<td>41%</td>
</tr>
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</table>
### PFE: BASELINE THROUGH Q3 – NH HOSPITALS

<table>
<thead>
<tr>
<th></th>
<th>BL</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
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<tbody>
<tr>
<td>Planning checklist…</td>
<td>23%</td>
<td>23%</td>
<td>54%</td>
<td>50%</td>
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<tr>
<td>Huddles and bedside</td>
<td>73%</td>
<td>73%</td>
<td>77%</td>
<td>77%</td>
</tr>
<tr>
<td>reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedicated PFE staff</td>
<td>62%</td>
<td>62%</td>
<td>62%</td>
<td>62%</td>
</tr>
<tr>
<td>Active PFE committee</td>
<td>73%</td>
<td>73%</td>
<td>73%</td>
<td>77%</td>
</tr>
<tr>
<td>Patients on boards</td>
<td>38%</td>
<td>38%</td>
<td>65%</td>
<td>69%</td>
</tr>
</tbody>
</table>

*Note: BL refers to Baseline, Q1 to Quarter 1, Q2 to Quarter 2, and Q3 to Quarter 3.*
BOLD AIMS

Reduce all-cause preventable inpatient harm by 40% and readmissions by 20%

1. Be in action to support your patients and their families by working on this project
2. Work to reduce harm across the board
3. Learn together by sharing your hospital stories, including successes and opportunities
4. Ensure that data are the foundation for all of your improvement
5. Work to spread and sustain the gains you have achieved across all areas within your organization
WHAT HAVE WE LEARNED?

- Change is hard but possible
- No data, no proof of improvement
- Barriers can be overcome – you just need to find the hospital that has done it
- One patient harmed is one too many
- Everyone in the HEN projects are passionate about this work and has been inspired by a personal story which motivates them to continue the improvement
AREAS OF SUCCESS FROM HEN 2.0

- Individual hospital coaching via site visits have provided invaluable for sharing ideas and removing barriers
- Leadership engagement and data transparency are allowing for improvement to occur
- Empowering high performing hospitals to share best practices and results
- Continuing to create (and update!) 100’s of resources and tools with feedback on what is needed from the hospitals to help support and sustain the improvement work
WHAT INSPIRES ME TO CONTINUE THIS WORK?
INSPIRATION

• Stay motivated and inspired to make change to reduce patient harm in the hospital and reduce readmissions
  – For yourself, for your family, for others and their families
PARTNERSHIP FOR PATIENTS (PFP) MODEL TEST IS ESTABLISHING TWO NEW BOLD AIMS

GOALS:

20% Overall Reduction in Hospital Acquired Conditions (baseline 2014)

12% Reduction in 30-Day Readmissions (baseline 2014)
## Sustaining and Accelerating Reductions in Harm: Progress to Date from AHRQ 2010 baseline

<table>
<thead>
<tr>
<th>Year</th>
<th>Harms/1,000 Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>145</td>
</tr>
<tr>
<td>2011</td>
<td>142</td>
</tr>
<tr>
<td>2012</td>
<td>132</td>
</tr>
<tr>
<td>2013</td>
<td>121</td>
</tr>
<tr>
<td>2014</td>
<td>121</td>
</tr>
</tbody>
</table>

### New Goal

- **2019**: 97 Harms/1,000 Discharges

*Actual chart reviews; not based on claims data*

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OUR REQUESTS TO EACH OF YOU

• **Choose** to Stand for Better Care, Better Health at Lower Cost...for Our Patients, Your Profession, Your State, Our Nation
• Use Your Platforms to Make This Happen in New Hampshire
• **Commit to the New Bold Aims** of the Partnership for Patients
• Remain Focused on **Reducing Harm Across the Board**
• Do **More** of What is Already Working...Everywhere
• Authentically & Fully **Engage Your Patients** in the Improvement Work
• **Lead** in Enrolling Others
• Stand **Together** in Serving As Catalysts for Change

Together We Can Continue to Achieve our Bold Aims

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Frisbie Memorial Hospital Community Care Team

Amy Guilfoil-Dumont, MSN, RN, CCRN, FACHE
Chief Clinical Officer/VP Patient Care Services
Community Care Team (CCT)

- Is a group of individuals representing healthcare providers (medical and behavioral health) in hospital and ambulatory settings, as well as social service and community support agencies, who align and combine resources to address community members at the highest risk for frequent utilization of Emergency Department services.

- The Community Care Team does not create clinical care plans, but rather “connects the dots” in coordinating the complex network of psychosocial supports and resources that many of these patients require but cannot access on their own.

- We replicated efforts of Middlesex Hospital in Connecticut
Partners
The vision for the Strafford County Community Care Team (SC-CCT) is to improve identification of our highest risk individuals and coordinate services, including delivery of medical, behavioral health, and non-medical services, addressing complex medical and psychosocial needs.
Target

• Our target for this initiative are patients who have had 12 or more visits to the ED within a period of 12 or less months, and/or patients who are homeless or living in unsafe environments.
High ED Utilizer Data
Quick Facts
46 unique patients accounted for 584 ED encounters at FMH from 1/1/2015-12/31/2015 (does not include ED encounters at WDH)
Avg. 12.6 ED visits in 12 month period: Range 27-> 4 visits

Behavioral/substance Dx: Bipolar Disorder, PTSD, Anxiety, Depression, ETOH, Opioid Abuse

Most common medical conditions: HTN, COPD, Migraine, Asthma, Chronic Pain, CA

Average age: 41; 54% Male
Marital Status
— Single 74%
— Married 15%
— Divorced/Widowed 11%

Coverage
Hospital or Healthcare Provider Role

- Community health workers within CCT members/affiliates execute care plans by pulling recommendations based on knowledge of the patient's needs.

- They are the “glue” that connects the pieces of the care plan in a way that best serves the client.

- Services that may be covered include case management, medication management and others such as transportation, housing, food, financial, and fuel assistance as well as outreach.
TIMELINE

June 2015
- Community Team at Workshop 6/13/2015

July 2015
- August 10, 2015
- 1st Meeting of Strafford County
- Planning Call 6/26/15

August 2015
- 1st Meeting of Strafford County
- September 2015
- 9/20/15 2nd Meeting of Strafford County CCT

September 2015
- October 2015
- November 2015
- 11/17 15 3rd Meeting of SCCCT

October 2015
- 11/1/2015 Approval of Strafford County CCT ROI
- 12/15/15 Meeting to plan training & referral/eval

November 2015
- 12/15/15 Meeting to plan training & referral/eval
- 11/17/15 3rd Meeting of SCCCT

December 2015
- 1/26/2016 - Meeting with FMH - providers - how to use ROI/ refer

January 2016
- And beyond

Planning Call 7/28/15

11/17/2015
- 1st “test” Case Conference

2/1/2016 - CCT Monthly meetings to begin w/case conf.
## Challenges and Constraints

<table>
<thead>
<tr>
<th>Issues/Obstacles</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many patients are uninsured/underinsured and NH state funded resources are few and scarce</td>
<td>Engage with Medicaid programs; use CCT to see flexibility in programs on team;</td>
</tr>
<tr>
<td>Resources/staff for data analysis are limited; Limited ability to see utilization outside of each individual organization</td>
<td>Limited data analysis; measure impact at the individual pt level as evidenced by decreased utilization from prior indiv. Baseline; Use ROI to allow access/sharing of data across organizations</td>
</tr>
<tr>
<td>Organizations do not have shared systems for data/management of communication</td>
<td>Limited by financial constraints (no defined budget) as well as HIPPA; use ROI to share information within CCT; use tools on hand</td>
</tr>
<tr>
<td>Providers unaware of CCT and how to coordinate practice within team</td>
<td>Provide in person training and outreach</td>
</tr>
<tr>
<td>Patients may lack motivation to participate-participation is voluntary</td>
<td>Use each encounter as opportunity to engage patients; patients are not obligated &amp; no fee to participate CCT</td>
</tr>
</tbody>
</table>
Process

- Identify and assess high risk patients based on behavioral and substance abuse issues as well as housing instability or homelessness for care planning.

- Develop clinical care plans (providers/CHW/CM), obtain consent/ROI, present care planning to CCT and achieve active participation of at least 6 clients by July 2016 - 1 year from start of initiative.

- Address fragmented care, gaps in care, exacerbations and/or complications of chronic disease and impaired social, economic and material resources within CCT with multi-agency collaboration.

- Co-manage to incorporate supportive services to address substance abuse (if applicable) or underlying behavioral health needs.
Measurements

- Reduce frequent visitor overall utilization of the ED for patients participating in the program by at least 10% within first 18 months

- Reduce readmission rates for patients who have more than 3 admissions in a 12 month period by at least 10% within first 18 months

- Improve connections to care following ED visit with follow up appointments with primary care provider within 3 days for at least 80% of CCT supported clients discharged from the ED/discharged from the hospital
Sue Ruka Ph.D, RN
September 20, 2016
NHHA Annual conference
Population Health at Memorial Hospital

- Understanding the community we serve is the cornerstone of Population Health and Community Health Improvement
- The goal is to use data, public input & collaborative initiatives to create healthy communities
- A key component is to reach people where they live, work and play and includes addressing social determinants and making policy changes
Partnerships and Collaboration

- We use our Community Health Collaborative to drive all our initiatives. The members include Memorial, VNS, NHS, WMCHC, SRMC, Gibson Senior Services, Children’s Unlimited, T. Murray Wellness Center, C3PH (public health)

- Using this model we have been able to work collaboratively and efficiently to address community needs
Fall Prevention

- Carroll County had high rate of falls with injury in senior citizens without Fall Prevention program in place
- Support from NH Foundation for Healthy Communities grant and MaineHealth allowed us to implement two evidence based programs in community
- Both programs use a lay leader model which has been demonstrated to result in program success and good outcomes
Fall Prevention/Reduction programs

- A Matter of Balance (AMOB) Managing Concerns about Falls is an award winning, evidence based program designed to help people manage their concerns about falls and increase activity.

- Experiencing falls & fear of falling can lead to deconditioning, social isolation and worsening medical condition.

- AMOB is an 8 week class offered in a variety of locations taught by trained coaches.

- Tai Ji Quan Moving for Better Balance was developed by a team of researchers and uses 8 forms derived from traditional Tai Chi.

- Research demonstrates that people who complete the program are half as likely to fall and are less fearful of falling.

- TJQMBB is a 24 week program taught by certified instructors.

- TJQMBB offers a continuation for a subset of AMOB graduates to help sustain behaviors.
Measurement

- AMOB started July 2015
- 3 people became Master Trainers with another 1-2 more to take course
- 20 community members trained as coaches
- 8 (8 week courses) were offered in 6 locations
- 76 participants completed AMOB
- Preliminary data using post-surveys demonstrate increase in self confidence, decrease fear of falling & determination to continue activity

- TJQMBB
- 4 instructors trained since Oct 2015
- 1 (24) week class completed 6-8 participants
- Second class started Sept 2016
- Pre-post surveys conducted
- Plan to send additional instructor to upcoming training as time commitment a barrier for lay coaches
Sandy’s Story

- “I was always falling—it was part of my life”. After a fall she was dependent on a walker, stopped driving and become socially isolated.
- She went into program thinking “What have you got that I haven’t already tried”
- “This program has done “absolute wonders for my physical & mental health”. It is best thing I have done for myself and I want others to know.
- Sandy is now a AMOB coach as is TJQMBB instructor
Healthy Aging

- A natural progression from our falls prevention program was to look “upstream” & help people make lifestyle changes earlier.

- With 43% of population expected to be 65 or older by 2030 we targeted people 50 and older and developed a Healthy Aging initiative”

- The initiative which is just starting includes a combination of strengthening classes, online database, healthy eating activities, yoga, health coaching and stress reduction support
Current Initiatives

A Matter of Balance
Managing Concerns About Falls

Let's Go!
www.letsgo.org

You Can Quit Smoking!

Change 4 Life
Eat well, Move more, Live longer

MaineHealth
Chronic Disease
Collaborative Care Delivery
Crisis vs Opportunity

• Supply and Demand mismatch is growing.
• Aging workforce and aging population.
• This year there will be more providers leaving primary care than entering.
• By 2025 estimates predict a shortage of 45 to 52 thousand primary care physicians.
Redesign

• Phase 1:
  • Team-based model of care
  • Define roles
  • Collaborative Care Nurse Education
• Phase 2:
  • Collaborative Care Nurse Deployment
  • Create EMR note types/templates
• Phase 3:
  • Stabilize
  • Optimize
  • Expansion (Pediatrics)
  • Promote (AWVs; CCNs involved with Community Education events with our Community Health Department).
Collaborative Care Model - Primary Care Provider (PCP) - led, team-based, collaborative care

PCP (MD/DO/Nurse Practitioner)

Collaborative Care Nurse
Works closely with your PCP to help manage chronic disease (diabetes, high blood pressure, COPD). Provides education and health coaching.

Team Phone Nurses
Helps triage and provides advice for your medical concerns/needs. Communicates directly with your provider.

Result Management Nurse
Contacts you about test results and provider recommendations. Communicates directly with your provider to help answer your questions about test results and arrange the appropriate follow-up care.

Medication Renewal Manager
Helps to ensure that your refills are completed in a timely fashion.

Call Center/Receptionists
Directs your incoming phone calls to the appropriate staff member. Schedules appointments, tests and consults.

Forms Manager
Helps to complete, track, and scan your paperwork into your medical record. Ensures that your paperwork is done in a timely manner. Works with pharmacist to obtain Prior Authorizations so that your prescriptions are covered by your insurance plan.

Patient
active participant in making health care decisions to meet individual goals and lifestyle

Associate Providers
(Physician Assistants and Nurse Practitioners) Diagnose. Prescribe treatment medications. Works closely with your PCP to ensure that your current treatment plans are being followed.

RN Care Coordinator
Helps facilitate your transitions of care from hospital to home or nursing home. Works closely with complex patients requiring support services. Follows up with you after an ER visit to ensure that you have appropriate follow-up care in place.

Registry Coordinator
Reaches out to you between office visits to ensure you are up-to-date with chronic and preventative guidelines (e.g., mammograms, immunizations, high blood pressure management, etc.)

Behavioral Health Consultant
Works with your provider to manage complex behavioral health issues.

Patient Flow Staff
Makes sure that you get the most out of your appointment by ensuring your vital signs, medication lists, allergies and immunizations are up-to-date.
Top of License
Example: Clinic RN
adapted from Health Care Advisory Board: Care Transformation Center; 12 Lessons on Transforming Primary Care

Old Model
• Spends vast majority of time on acute ailments in the form of walk-in care or triage on the phone.
• Takes incoming patient calls concerning medication and lab results.
• Refills medications.

New Model
• Proactively reaches out to patients to encourage self-management.
• Provider or patient can schedule time with RN for one-on-one education.
• Utilizes chronic care guidelines to provide a framework for consistency across patients that leads to best practice, improves outcome measures and allows for better delegation to other team members.
Collaborative Care Nursing

- Imagine a nurse working at the top of her license to assist with timely continuing education and chronic disease management.
- Imagine increased PCP access because this Nurse Team is doing the q3-q6 month follow-up appointments that currently congest our schedules.
- Imagine a role that helps Primary Care avoid resource depletion, duplication of work and team burnout.
What Can They Do?

- Hypertension
- COPD Action Plans
- Annual Wellness Visits
- Advanced Care Planning

- Diabetes
  - Glucometer teaching.
  - Diabetic Education with new and established Diabetic patients
  - New Insulin starts.
  - Medication Adjustment per protocols.
    - Oral hypo-glycemics
    - Lantus Insulin adjustment up to 30 units.
Nurse Education Checklist

- Diabetes
  - Glucometer teaching
  - Insulin administration teaching
- HTN
- Motivational Interviewing
- EMR/Documentation

- COPD
  - COPD Action Plans
  - Smoking cessation
  - Spirometry
  - Inhaler Technique
  - Pulmonary rehab
- Advanced Care Planning (Honoring Care Decisions)
Redesign

• Phase 1:
  • Team-based model of care
  • Define roles
  • Collaborative Care Nurse Education

• Phase 2:
  • Collaborative Care Nurse Deployment
  • Create EMR note types/templates
  • Develop chronic disease medication protocols/workflows

• Phase 3:
  • Stabilize
  • Optimize
  • Expansion (Pediatrics)
  • Promote (AWVs; CCNs involved with Community Education events with our Community Health Department).
Example of Integration of Collaborative Care Role

REGISTRY MANAGEMENT IN DM2

PDC to generate registry of all pts with DM2 on monthly basis

Review chart:

Order HgbA1C/BMP if NOT done in last 3 months. Remove any other lab reminders from system. Notify patient.

Appt with PCP or team in next 1 month?

YES

Forward note containing information for provider visit.

NO

PDC will Filter registry by HGBA1C targeting those greater than or equal to 9.0

PDC to review this filtered list with provider-specific Collaborative Care Nurse.

Collaborative Care Nurse will then:

Schedule appt with Collaborative Care Nurse.

At appt Collaborative Care Nurse will:

Review with patient educational info and lifestyle control

Review glucose monitoring and med compliance

Identify obstacles to better control. Diet? Cost? Activity?

Note containing info and lab results will be sent to PCP to review

PCP to determine appropriate med protocol for CCN to follow and sends this info back to collaborative care nurse via task.

Collaborative Care Nurse to document and initiate protocol

Follow up with PCP/Teamlet within 3 months

If barrier includes access to medication then engage Medication Assistance Program CMC

If barrier includes inadequate physical activity consid

Activity is Good Medicine at YMCA (When program again available)

If barriers include diet consider referral to CMC/DHK Dietician

If barrier includes tobacco use then engage CMC/DHK Tobacco Cessation Program

If needs eye exam, send referral to ophthalmology

Administer immunization if due for pneumonia or flu vaccine
Collaborative Care Nurse Working Algorithm for Patients with Diabetes

**DIABETES MANAGEMENT**

**Lifestyle Modification and Education**

**Engaged Patient with opportunity for improvement in lifestyle**

- **ENTRY HGBA1C less than 9.0?**
  - **YES**
    - Monitor glucose bid x 2 weeks
    - Improve?
      - **YES**
        - Continue same pathway with every 2 week check-ins until routinely fbs is less 130 or random/postprandial glucose is less than 180.
      - **NO**
        - Repeat HGBA1C in 3 months
    - **NO**
      - Consider addition of medications. Discuss with provider.

**Engaged patient already participating in lifestyle modifications OR Lifestyle modification insufficient to produce good control**

- **ENTRY HGBA1C less than 7.5 OR less than 8.0 based on age and comorbidities**
  - **MONOTHERAPY**:
    1. Metformin ER
    2. Metformin
    3. Glimeperide (intended for pts with elevated Cr who can not use Metformin)
  - **YES**
    - Institute Protocol for Medication of Choice.
    - After 3 months, is HGBA1C greater than 7.0 (or 8.0 in older patients with comorbidities)?
      - **YES**
        - Reinforce Lifestyle approach, importance of monitoring glucose and medication compliance. HGBA1C every 6 months
      - **NO**
        - 3rd Oral Agent per PCP
  - **NO**
    - Institute Protocol for Medication of Choice.
    - After 3 months, is HGBA1C greater than 7.0 (or 8.0 in older patients with comorbidities)?
      - **YES**
        - Basal Insulin per PCP
      - **NO**
        - 3rd Oral Agent per PCP

**ENTRY HGBA1C greater than 8.0 based on age and comorbidities**

- **DUAL THERAPY**:
  - Metformin ER, Metformin + Glimeperide
  - **YES**
    - Institute Protocol for Medication of Choice.
    - After 3 months, is HGBA1C greater than 7.0 (or 8.0 in older patients with comorbidities)?
      - **YES**
        - Basal Insulin per PCP
      - **NO**
        - 3rd Oral Agent per PCP

**ENTRY HGBA1C greater than 9.0**

- Are Symptoms present?
  - **YES**
    - Start Metformin if not present.
  - **NO**
    - BASAL INSULIN:
      1. Lantus
      2. Levemir

Cheshire Medical Center
Dartmouth-Hitchcock Keene
What we know now...
Collaborative Care Nurse Visits
Dec 2014-Dec 2015

n=4385

DM, COPD and HTN: 119
COPD and HTN: 216
DM and COPD: 14
DM and HTN: 1156
COPD: 35
HTN: 2664
DM: 181
Collaborative Care Nurse Visits by Diagnosis
Dec 2014-Dec 2015
n= 4385

DM & HTN 26%
HTN 61%

DM
HTN
COPD
DM and HTN
DM and COPD
COPD and HTN
DM, COPD and HTN
Outcomes: Collaborative Care Nurse v Usual Care
Jan 2015 - Oct 2015
n= 442

- Any decrease of A1C in patients seen by CCN
- Any decrease of A1C in patients with usual care

Team A: 63% (54%), Team B: 66% (49%), Team C: 43% (22%), Team D: 35% (18%)
Outcomes: Collaborative Care Nurse v Usual Care
n= 442

Team A:
- CCN patients: 48%
- No CCN visits <9: 44%

Team B:
- CCN patients: 42%
- No CCN visits <9: 37%

Team C:
- CCN patients: 33%
- No CCN visits <9: 15%

Team D:
- CCN patients: 31%
- No CCN visits <9: 15%
Redesign

- Phase 1:
  - Team-based model of care
  - Collaborative Care Nurse Education
- Phase 2:
  - Collaborative Care Nurse Deployment
  - Create EMR note types/templates
  - Develop chronic disease medication workflows and protocols.
- Phase 3:
  - Stabilize: Create a sustainable education plan.
  - Optimize utilization across the entire department.
  - Expand – Discussions around developing a Collaborative Care Nurse in Pediatrics to address Obesity and Hypertension
  - Engage: Annual Wellness Visits to help generate the revenue to support this care model.
Collaborative Care Nurses 2.0

Partners in Chronic Disease Management
QUESTIONS?