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Module 1

Practice Facilitation as a Resource for Practice Improvement

Practice Facilitator Professional Development and Training Plan

Practice Facilitator Professional Development and Training Plan

*** 1. Professional Development and Training Plan for:**

*** 2. How much previous experience have you had working in healthcare environments?**

	No experience	Some experience	Substantial experience
Primary care (non-safety net)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Primary care (safety net)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specialty care setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hospital setting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ancillary service environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Briefly describe your experience:

*** 3. How much previous experience have you had supporting Quality Improvement in any environment?**

- No experience
- Some experience
- Substantial experience

Briefly describe any experience:

*** 4. How much previous experience have you had in collecting and analyzing data?**

- No experience
- Some experience
- Substantial experience

Briefly describe any experience:

Practice Facilitator Professional Development and Training Plan

*5. (General theories of change) Please rate how confident you are with your knowledge of the following topics:

	Not at all confident	Somewhat confident	Confident	Very confident
Complexity theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solberg Practice improvement model	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diffusion of innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empowerment theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asset based development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adult learning theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

*6. (Practice facilitation) Please rate how confident you are with your knowledge in the following areas:

	Not at all confident	Somewhat confident	Confident	Very confident
General background on practice facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research evidence about practice facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Typical stages in the facilitation process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Core competencies of practice facilitators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Common approaches to practice facilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On-line resources for practice facilitators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

Practice Facilitator Professional Development and Training Plan

***7. (Practice facilitation) Please rate how confident you are with your skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Assessing a practice's readiness for engaging in improvement work with a facilitator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preparing a practice to work with a facilitator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engaging patients as part of an improvement team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conducting a kick-off or first meeting with a practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building a relationship with a practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying ineffective facilitator-practice partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facilitating meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Project management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

Practice Facilitator Professional Development and Training Plan

***8. (Knowledge of the safety net) Please rate how confident you are with your knowledge of the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
General knowledge of the health system and how it operates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Federally Qualified Health Centers (FQHCs) and their structure, mandates and financial drivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Health Centers and their structure and financial drivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private practices and their structure and financial drivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make-up and needs of their patient populations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The local healthcare system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The local healthcare environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Payer community and their priority concerns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IPAs and other organizations supporting the primary care safety net in your area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

Practice Facilitator Professional Development and Training Plan

***9. (Health Service Models and Meaningful Use) Please rate how confident you are in your knowledge of the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Chronic Care Model or Expanded Care Model (CM)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient Centered Medical Home (PCMH)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient Centered Medical Home recognition requirements (National Committee for Quality Assurance (NCQA), other)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient Aligned Care Teams (PACT)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meaningful Use requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

Practice Facilitator Professional Development and Training Plan

*10. (Quality Improvement Approaches & Tools-General) Please rate your confidence in your knowledge and skills in the following areas:

	Not at all confident	Somewhat confident	Confident	Very confident
Model for Improvement (MFI)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using Plan Do Study Act (PDSA) Cycles with practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic concepts of LEAN	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic concepts of Six Sigma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic detailing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benchmarking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workflow mapping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decision support tools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Site visits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning collaboratives and local learning collaboratives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying "exemplar" processes/practices and documenting them for spread	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

Practice Facilitator Professional Development and Training Plan

* 11. (Workflow Mapping) Please rate your confidence in helping a practice map the following key processes:

	Not at all confident	Somewhat confident	Confident	Very confident
Answering phones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making appointments and triage process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scheduling procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reporting diagnostic test results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prescription renewals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making referrals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre-authorization for services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Billing/coding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phone advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assignment of patients to practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Orientation of patient to practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New patient work-ups	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education for patients/families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prevention assessment/activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chronic disease management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area:

Practice Facilitator Professional Development and Training Plan

*** 12. (Data Collection-General) Please rate your confidence in:**

	Not at all confident	Somewhat confident	Confident	Very confident
Measuring organizational systems (capacity for improvement, functionality of key systems, leadership)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Measuring clinician and staff experience (satisfaction, burn-out, clinician-staff interaction (team work), practice climate)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Measuring patient experience (how treated by practice, clinician-patient interactions in understanding, shared-decision making, relationship building)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Measuring team-patient interaction (transferring trust in clinician to trust in team)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Measuring implementation of the Care Model	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Measuring implementation of the Patient Centered Medical Home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing payment mechanisms (what works, what is dysfunctional, what will incentivize improvements needed)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

* 13. (Data Collection-Clinical Performance) Please rate your confidence in your knowledge and skills in the following areas:

	Not at all confident	Somewhat confident	Confident	Very confident
Use of HEDIS quality indicators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of HRSA's Uniform Data System (UDS) reports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conducting paper chart audits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating reports through I2I or other patient registry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating reports through E Clinical Works	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating reports through Next Gen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating reports through Epic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

***14. (Data Collection-Management and Display) Please rate your confidence in your knowledge and/or skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Creating a database for survey and performance data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing and cleaning databases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to determine denominators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analyzing data for frequencies and central tendencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generating visual displays of data such as run charts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HIPAA rules and regulations for protecting personal health information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

***15. (Creating QI Infrastructure and Capacity in a Practice) Please rate your confidence in your knowledge and skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Creating priority for change in practice/organizational leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forming a QI committee or improvement team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating an improvement plan or QI charter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Optimizing team functioning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using data to drive improvement (identify needs, monitor progress)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating systems for routing performance monitoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

*16. (Managing Relationships) Please rate your confidence in your knowledge and skills in the following areas:

	Not at all confident	Somewhat confident	Confident	Very confident
Building relationships with clinicians and staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing and resolving interpersonal conflict	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Motivating staff and clinicians to engage in improvement activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with diverse individuals (MAs, RNs, MDs/DOs, patients, administrative staff)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining healthy communication (avoiding triangulation, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining healthy boundaries with staff/clinicians (building capacity vs. doing for)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

*** 17. (Implementing Care Teams_General) Please rate your confidence in your knowledge and skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Knowledge of best practices and exemplars in team based care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training practices in concepts of team based care and associated culture change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Redefining clinical roles and responsibilities to support team based approaches to care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Licensing limitations for roles/clinicians (what each can and cannot do)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Redesigning workflow to support team based care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

*** 18. (Implementing Care Teams_ Workflow for Specific Patient Groups) Please rate your confidence in your knowledge and skills in helping practices stratify patients and redesign workflow for team based care for:**

	Not at all confident	Somewhat confident	Confident	Very confident
Healthy/preventive care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acute problems (major/minor)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chronic conditions (diabetes, hypertension, CHF)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complex care needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chronic pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Women's health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pregnancy/well child care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Palliative/end of life care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

*19. (Implementing Care Teams Workflow for Key Visit Related Administrative Activities)

Please rate your confidence in your knowledge and skills in helping practices map and redesign workflow related to care team functioning in key visit related administrative activities:

	Not at all confident	Somewhat confident	Confident	Very confident
Registration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making appointments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
MA role (pre-visit, vitals, agenda setting, checking chronic and preventive care needs and ordering them)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receipt of test results- Clinician (lab, x-ray, other results)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Receipt of test results - Patient (normal, slightly abnormal, very abnormal)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal messaging (which emails go to whom, action required)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prescription refills (chronic meds, acute meds, secure script meds)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Billing workflow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Filling out forms (clinician role, other team member role)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

***20. (Panel management) Please rate your confidence in your knowledge and/or skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
General knowledge of principles and processes of panel management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledge of best practices and exemplars in implementing panel management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training practices in concepts of panel management and creating culture change to support it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training panel manager and creating protected time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helping practice define what decisions panel managers can make (ordering labs, x-rays, titrating meds via protocol, referring patients to classes, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Optimizing EHRs and creating patient registries and reporting systems to support panel management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

***21. (Creating Panels) Please rate your confidence in your knowledge and skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Knowledge of best practices in creating patient panels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training practices in key elements of assigning patients to panels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Optimizing HIT systems to support assigning patients to panels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assisting practices in assigning patients to panels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating the implementation of panels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementing policies/procedures that support continuous empanelment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

***22. (Assessing & Improving Self-Management Support for Patients) Please rate your confidence in your knowledge and skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Knowledge of best practices in self-management support including the use of health coaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing a practice's self-management support resources and processes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helping practices enhance their self-management support services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

***23. (Care Coordination) Please rate your confidence in your knowledge and skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Knowledge of methods of care coordination (specialists, ED, hospitalists (admission, during stay, discharge), pharmacy, lab/imaging, home care, hospice)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training practices in general concepts of care coordination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assisting practices to implement care coordination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Payment and care coordination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

***24. (Meaningful Use) Please rate your confidence in assisting practices in redesigning the following workflows to achieve Meaningful Use:**

	Not at all confident	Somewhat confident	Confident	Very confident
Recording patient demographics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recording vital signs electronically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining up to date problem list	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining active medication list	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintaining active allergy list	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recording smoking status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Providing patients with clinical summaries for each office visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-prescribing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drug-drug and drug-allergy interaction checks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exchanging electronic information with other sites of care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementing a decision support rule and track compliance with the rule	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Systems to protect privacy and security of patient data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Report clinical quality measures to CMS or states	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generate lists of patients for QI or outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electronic health education resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medication reconciliation between care settings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summary of care record for referrals and transitions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Immunization data to regional registries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Surveillance data to public health agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient reminders for prevention/chronic care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient access to lab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Practice Facilitator Professional Development and Training Plan

results, problem
medication lists, allergies

Drug formulary check

Lab results into EHR

Please identify your learning goals for this area

Practice Facilitator Professional Development and Training Plan

***25. (Professionalism) Please rate your confidence in your knowledge and skills in the following areas:**

	Not at all confident	Somewhat confident	Confident	Very confident
Documenting your encounters with your practice in a PF "practice registry" or encounter form	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating your challenges/needs and successes to your supervisor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communicating your challenges/needs and successes to other PFs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing your time during practice encounters and administrative time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please identify your learning goals for this area

26. Please describe any other skills/knowledge you have that are relevant to PF that may be resources for your program and other PFs in your program:

27. Please describe any other areas in which you believe you need training/support in order to feel confident as a PF:

Module 2: Working With Safety Net Practices

Clinica Family Health Services Case Study

Note: This case study was developed by Tom Bodenheimer, M.D., Center for Excellence in Primary Care, Department of Family and Community Medicine, University of California, San Francisco, and is used with permission. It has not been modified or edited except to correct typographical errors, grammatical errors, or misspellings. Questions may be addressed to TBodenheimer@fcm.ucsf.edu.

Clinica Family Health Services

Notes from April 18, 2011 visit

History and Demographics of Clinica by Thomas Bodenheimer

Clinica Family Health Services is a non-profit Federally Qualified Health Center serving the area northwest of Denver, Colorado.

Clinica was founded by Alicia Juarez Sanchez, a woman with a serious chronic condition who assisted other patients, driving them to their medical care providers. She realized that Latinos in Colorado needed a clinic to care for them, and organized community members to open a clinic which began one night a week in her kitchen. A local physician volunteered his time, and a nurse practitioner began seeing patients regularly. Within a year the clinic had moved to a store front, and was open 5 days a week. The nurse practitioner continued working for 30 years with the community as the organization grew. In 1981 the clinic became a federally funded community health center. The clinic was initially called Clinica Campesina, since many of its patients were farmworkers (campesinos). More recently, “campesina” was removed from the name since urbanization changed the occupations of most patients from farmworkers to service workers.

Since its inception, Clinica has grown enormously, now caring for one-third of low-income people in the communities in which it is situated, with 40,000 active patients, 170,000 visits per year, 46 physical health providers, 13 behavioral health providers, 4 dental providers, 2 full pharmacies, and a total staff of 320. Clinica has 4 sites, Pecos and Thornton in Adams County, and Lafayette and People’s in Boulder County.

Fifty percent of Clinica’s patients are uninsured, 40% are Medicaid recipients, and 3% have Medicare. 56% are below the federal poverty line and 98% are below 200% of the federal poverty line. The majority are Spanish-speaking only, and all providers and staff working directly with patients are bilingual.

In 1998, Clinica began its never-ending improvement journey, joining the Health Disparities Collaborative sponsored by the federal Bureau of Primary Health Care and led by the Institute for Healthcare Improvement and the MacColl Institute for Healthcare Innovation. Clinica worked on improving chronic illness care for patients with diabetes by focusing on making appointments available, tracking patients with diabetes with a registry, and implementing evidence based guidelines for delivering indicated care. In 2000 Clinica initiated more far-reaching changes in the clinic, redesigning its entire care model by drastically improving access to care, prioritizing continuity of care as the bedrock of the clinic, creating care teams, and instituting group visits. From 2001 to 2004, Clinica re-designed its care of chronic conditions

and preventive services based on its care teams, and changed the internal architecture of its clinics to allow co-location of care teams. A series of non-stop improvements followed, including behavioral health integration, a nurse and pharmacist-run anti-coagulation service, the implementation of the NextGen electronic health record with changes in dozens if not hundreds of workflows associated with a computerized primary care clinic, population management to provide outreach to patients overdue for chronic or preventive services, improved care coordination with specialists and hospitals, and the addition of case managers to care teams to provide self-management support to all patients with chronic conditions.

Clinica has amassed much wisdom that other primary care clinics and practices could learn from. This summary of how Clinica functions is based on an April, 2011 visit to Clinica's Pecos site.

Continuity of Care and Access to Care

Every patient is empaneled to a primary care provider (PCP -- physician, nurse practitioner or physician assistant) and a care team (called a pod). Each pod has a color, and patients know their pod by its color. Continuity of care is measured regularly by determining the percentage of patient visits that are visits to the patient's own PCP or to the patient's pod. Clinica's goals are 70% PCP continuity and 90% pod continuity, goals that are often reached.

PCP continuity is most easily achieved by having providers who work at least 80% time. Because of the difficulty recruiting excellent primary care providers, Clinica has chosen not to demand full-time status of its providers, and about half are part time, with others occasionally absent due to maternity leave or vacations. Given these conditions, 70% PCP continuity is about as good as one could get.

The secret to achieving continuity of care—which is important because it improves care, reduces costs, increases patient and provider satisfaction, and reduces unnecessary demand—lies in how clinic staff are trained. Clinica has a call center, located in the Pecos site, serving all four sites. The call center attendants, who are generally high school graduates trained by the call center director, have clear instructions how to balance the needs for both continuity and access. When a patient calls, the attendant will offer an appointment with the patient's PCP. Only if the patient wants to be seen today or tomorrow and the PCP is unavailable those days, will the patient be given an appointment with another provider on the same pod. In many practices, staff answering phones say to patients something like: "If you want to see your doctor, the next appointment is in 2 weeks, but you can see a different doctor tomorrow." This message essentially prioritizes access over continuity, while the Clinica message prioritizes continuity but allows patients to choose access if their PCP is not available promptly. All clinic personnel understand that continuity of care is the bedrock of good primary care. Clinica has a continuity of care improvement team, and the call center director participates on that team.

If achieving continuity of care is like climbing a 5,000-foot mountain, sustaining prompt access to care is like scaling one of Colorado's 14,000-foot peaks. For over ten years, Clinica has been able to provide almost all care to its patients within 5 days of their request for an appointment, usually within 2 days. How is this done?

The first challenge is to provide reliable phone access, which is done through the call center, which has sufficient call center attendants to handle a huge volume of calls, 1200-1500 per day,

with a peak of 1100 calls before 11 AM Monday mornings. 98 to 100% of calls are handled (not dropped), and 80% are picked up within 90 seconds, with these metrics followed on a regular basis.

Call center attendants are well trained in the pod system, the NextGen EMR, how to use the clinical protocols, how to refer callers to outside resources, and customer service. The call center director listens to a certain percentage of calls and mentors the attendants. Initial training takes 2 weeks, and new attendants work with a trainer until they are ready to take calls alone. The attendants have protocols, for example, to have the patient call 911 in case of chest pain or other emergent symptoms, to call the cell phone of the RN on the patient's pod in case of urgent but not emergent symptoms, to send an electronic message to the RN on the pod for non-urgent clinical matters, and to make appointments using the continuity of care priority.

After phone access comes prompt access to appointments. Clinica measures Third Next Available Appointment (TNA), a well-recognized access metric. The appointment template is opened up for only 2 weeks; no appointments are made after 2 weeks. This allows all providers' schedules to be empty, meaning that TNA cannot exceed 14 days. Moreover, the no-show rate with schedules open for 2 weeks is about 8%. Clinica has experimented with opening up schedules for 3 weeks, but the no-show rate jumps to about 30%. Clinica attempts to fill providers' schedules only from 8 to 10 AM and to leave the remainder of the schedule open for same or next day appointments. This is not always possible during the first week, but for most providers many slots are open the second week. Clinica-wide, TNA in 2010 ranged from 2 to 6 days, often higher in flu season and in August/September with back-to-school physicals. TNA is also measured for each site, each pod, and each provider.

Call center attendants, in addition to their understanding that continuity is the first priority, are instructed that they never say No to a patient. Either patients receive an appointment within 2 weeks, or if patients request a later appointment they are asked to call back close to the time when they want the appointment, or their call is forwarded to the pod to squeeze them in that day.

Providers, when they are in clinic, have appointment slots every 20 minutes from 8:20 through 12:20—13 patients in the AM. Lunch is from 1-2 and huddle from 2-2:20. The afternoon runs from 2:20 to 5 with the last patient seen at 5. On days when the clinic is open until 8, many providers work 12-hour shifts, from 8 to 8. Those having evening clinic do not work in the morning. Providers have one 20-minute slot for each 5 slots for catch-up and care coordination, but many transfer that slot to the end of the day to get home earlier. Many do part of their documentation from home.

Full-time providers are expected to see 100 patients per week, a necessity because Clinica depends on visit-based FQHC reimbursement for patients on Medicaid. 80% providers need to see 80 patients per week. Providers can vary their schedule templates as long as they see enough patients per week. When a provider is participating in a group visit, the schedule is blocked for the time in the group visit.

An important policy supporting continuity of care is that providers are expected—within reasonable limits—to squeeze patients into their schedule for their patients, but not for another

provider's patients. The RN on the pod, who also functions as pod coordinator, would receive a request from the call center to squeeze a patient in, and depending on the acuity of the patient and how backed up the providers are, would decide whether to squeeze in the patient or have a nurse encounter (in person or by phone).

If patients want appointments in, for example, 2 months, they are told to call back the week they want the appointment. If providers want to make appointments for their patients in 3 months, that is not possible, but two mechanisms are available to ensure that those patients will not drop through the cracks. First, many patients are entered into a chronic disease registry (see below under Panel Management), and will be called by a panel manager when they are due for care. Second, providers can task themselves or task the front desk (with an e-mail message through the EMR) to contact a patient who needs an appointment in 3 months—essentially an electronic tickler system within the EMR. In this way, providers are not anxious about patient needs being dropped. To allow this access policy to work, patients are informed about it on their first visit to Clinica, and by now patients are used to the policy and accept it.

Clinica is able to keep its TNA under a few days by matching demand and capacity, which is done in four ways: 1) limiting panel size to control demand, 2) adding capacity through RN and case manager care (see below under Care Teams), 3) adding capacity by extending the interval between visits if medically appropriate, and 4) adding capacity through group visits (see below under Group Visits).

Demand for appointments is determined by risk-adjusted panel size. Risk-adjustment is done by determining the number of visits per year of different strata in the clinic's population; for example, infants, young women (who often become prenatal patients) and the elderly require more visits per year. Clinica has made the decision to provide high-quality, comprehensive primary care with prompt access to its patients (40,000 of them) rather than to provide lower-quality urgent care to everyone. In other words, you cannot take care of the whole world, and if you have too much work, you simply have too much work and you cannot do it well. This is a policy decision each primary care clinic/practice needs to make. As a result, Clinica has a waiting list sometimes reaching 4,000 patients, who would like to receive care but cannot do so because panels are full. Average active panel size is about 1200, which takes into account the large number of infants and prenatal patients who require frequent visits. Panels are reviewed and tweaked regularly to determine if patients are actually seeing the provider to whom they are empaneled and whether a provider is over- or under-paneled. Patients who have not been to the clinic for 18 months are removed from active panels because many of these patients never return to the clinic.

Access to care must also balance the needs of patients with the needs of the clinic and clinic personnel. Clinica sees patients from 8-6 Mondays, 8-8 Tuesday, Wednesday, Thursday, and 8-5 Fridays. It is closed weekends. When the clinic is closed, a nurse line (run by the municipal Denver Health system which is paid by Clinica for this service) picks up calls and forwards them to the call center by e-mail or pages Clinica's on-call provider.

The clinic is closed from 1 PM to 2:20 PM, with one hour for lunch and 20 minutes for the afternoon huddle on each pod. Phones are also closed during this time, and call center attendants also have their huddle from 2 to 2:20, discussing any changes in scheduling or protocols,

reviewing training, and going over problems that might have arisen. While the phones are off, the Denver Health nurse line picks up calls and forwards them to the call center by e-mail. Each call center attendant has a 15-minute break in the AM, but no break in the PM because the PM phone hours are 2:20 to 5 (2:20 to 4 on Fridays).

Using these policies and protocols, Clinica has been able to balance the goals of continuity and access, a huge challenge for any primary care organization.

Pods (Care Teams)

All clinical activity at Clinica centers around the pod. For patients, the pod (the same thing as the care team) is where they receive care. It is well known that patients prefer to receive their care in smaller health care settings. Breaking down a larger organization into smaller units—in the case of Clinica, pods—allows patients to feel comfortable because the members of the pod know them and they know the people on their pod. Clinica patients see themselves as patients of the Green Pod or the Blue Pod or the Purple Pod. Because Clinica is a good place to work, many physicians, nurses and medical assistants have worked there for 12 or 15 years, making longitudinal continuity of care possible and allowing pod members to truly know the patients on their panels.

Each of the four Clinica sites has several pods. The walls of each pod reveal the pod's color. Pods are both physical entities and organizations of people. Architecturally, each pod consists of a central open area—either a rectangle or a circle—surrounded by patient exam rooms. Pod members are co-located, working right next to one another so it is very easy to communicate. Not only can pod members easily interact with one another, they can also see all the patient rooms, which have multicolored flags (black is the MA, red is the provider, blue is the behavioral health provider, green is the case manager) telling everyone on the pod who is in which room.

The suborganization of the pod consists of a provider (physician, nurse practitioner or physician assistant) always (with rare exceptions) working with the same medical assistant (MA). The provider and MA sit facing each other on the pod. Each of the thirteen pods at Clinica's four sites has 3 full-time equivalent providers (generally 4 people due to part-timers), 3 MAs (one per provider at each session), 1 behavioral health professional, 1 RN, and 1 case coordinator, and one medical records person. Front desk personnel are part of the pod, and geographically sit between the physical pod and that pod's waiting room. The same people always (with rare exceptions created by vacations or other absences) work on the same pod. Patients are empaneled both to a pod and to a provider/MA dyad. For each dyad, a colorful business card shows patients the name of their provider and MA.

From 8 to 8:20 and from 2 to 2:20, each pod has a huddle, going over the patients scheduled for the day—the schedule is available in hard copy to take notes on—to plan what each patient might need. For example, the behavioral health provider and the case coordinator will gain an idea of which patients are likely to need their time, and MAs will know who will need a procedure. If a group visit is scheduled, everyone will know which provider, RN and/or MA involved in the group visit will be off the pod for a certain period of time.

Two people on each pod have leadership roles. One MA is half-time MA and half-time MA team manager (training and supervising MAs, handling their time sheets, and doing their performance reviews). The pod's RN is also the flow coordinator, making sure that all runs smoothly and intervening to solve problems. Because everything can be seen from anywhere in the pod, problems that arise are easily seen. An example of a flow problem might be a provider who is running an hour behind due to unexpected complicated patients. In that case, the RN will initiate the visit with patients who are waiting, allowing the provider time to be greatly shortened. However, patients empaneled to a stressed provider are not switched to another provider in order to preserve the all-important continuity of care.

A striking visual impression of a Clinica pod is that everyone—providers, MAs, RNs, behavioral health providers—carries a laptop everywhere they go. The laptops are like a third arm, and no one dares go anywhere without them. In this way, the electronic medical record goes with each team member rather than having care team personnel go back to a computer to document care that is given.

Patient flow on the pod seems calm and organized. After patients have checked in with the pod's front desk person, that patient's MA receives an electronic message in her in-box, and she brings the patient into the exam room. Since each provider has 3 exam rooms, everything—pre-visit, visit, immunizations, lab work, behavioral health discussions, goal setting with the case manager—all happen in the same exam room.

Two pods share a procedure room, which focuses on obstetric ultrasounds (read by primary care providers), sigmoidoscopies, culposcopies, vasectomies, circumcisions, skin biopsies, and IUD insertions and removals. While Clinica has plenty of complex patients, a large number of its patients are young women and children, which explains the predominant types of procedures needed. MAs set up the procedure room, using a detailed manual that describes exactly what is needed for each type of procedure, and assist with the procedures. Each provider does each type of procedure in the same way, demonstrating the standardization of care processes so evident at Clinica.

Medical assistant role

The MA brings the patient into the room, does vital signs, checks smoking status, and takes a detailed history using the template on the NextGen EMR. Templates exist for well child checks (templates may vary by age), diabetes, ADHD, asthma, anticoagulation, prenatal care, tobacco cessation, SBIRT screening, and complaint-specific history of present illness. In the case of patients with diabetes overdue for an HbA1c (done by a point-of-care machine) or a foot exam, or an appointment for a retinal exam (done with a retinal camera as a group visit), MAs perform those tasks. After the MA enters the history into the templated EMR, the EMR provides the history in a form easily reviewed by the provider. For children, the EMR includes decision support on which immunizations are needed, and the MA draws up the immunizations while the provider is seeing the patient and gives the shots in the post-visit. Providers are not involved in providing immunizations. MAs do not have time to do medication reconciliation or behavior change counseling; those functions, if indicated, are provided by the case manager immediately following the provider visit. The MA pre-visit takes 10-15 minutes.

If the provider wants the MA to do a post-visit (immunizations, blood draws, or other activities), an electronic message is sent to the MA and the black flag is put into the MA-needed position. If an appointment is needed within 2 weeks, the MA would make the appointment.

RN role

Many primary care practices do not have RNs, and for other practices, the RN role may not fully utilize the depth and breadth of skills possessed by RNs. RNs at Clinica have clearly defined roles that allow and require them to work at the very top of their license. The RN role has three interrelated parts: 1) addressing situations that arise everyday in primary care, situations needing skill in assessment and decision-making, 2) handling less complex clinical matters that can be protocolized with physician-written and approved standing orders, and 3) serving as pod flow coordinator.

For the first area of work, RNs receive electronic or phone messages from the call center regarding clinical problems faced by patients. A patient may call about abnormal uterine bleeding, a severe headache, or a medication refill; a family may call because grandmother has fallen or suffered a brief episode of right leg weakness. Hundreds of such situations arise, and RNs need the clinical acumen to assess what is needed: 911? Emergency room? Appointment today? Prescription called into the pharmacy? Physician to call the patient within the hour? Clinica RNs make dozens of these decision everyday.

The second area of work is the management of certain specified acute problems. Clinica physicians have approved standing orders for RNs to treat positive strep throat infections, uncomplicated conjunctivitis and ear infections, head lice, sexually transmitted diseases such as chlamydia and gonorrhea, uncomplicated urinary tract and respiratory infections, and the management of warfarin dosing for patients needing anti-coagulation. Some of these problems can be diagnosed and treated by the RN—without the provider—based on a phone call or face-to-face RN visit. Others come to the RN’s attention through certain lab results that are channeled to the RN’s EMR in-box (“RN labs”), for example, positive strep cultures, urine cultures, or chlamydia cultures. The RN would call these patients, provide patient education, and order the appropriate medications according to the standing orders. Thus the RN is not diagnosing, but is initiating treatment based on a diagnosis provided by the lab. RNs taking on these responsibilities allows providers to spend more time caring for complex diagnostic and management problems, and building relationships with their patients.

RNs also take care of warfarin dosing for patients on anti-coagulation, checking the INR lab results (with an on-site INR machine) and titrating warfarin doses according to a dose calculator. Pharmacy students review the warfarin registry to look for drug interactions, patients who may be missing timely INR checks. As part of Clinica’s robust self-management support philosophy, patients are asked to write down their warfarin doses and INR results on their personal anti-coagulation card, and are asked how confident they are, on a 0-10 scale, that they can self-manage their anti-coagulation treatment. Having patients do these simple things themselves helps activate them as participants in their care.

The RN role as pod flow coordinator often involves RNs performing patient visits if a patient drops in, if no appointments are available, or if a provider is running far behind. If the RN visit involves a clinical problem with an RN treatment protocol (standing order), the RN can do that

visit herself. More often, these visits turn into co-visits with the patient's provider coming at the end of the visit to confirm a diagnosis, and approve, change, or make a care plan.

The RN is constantly assessing how things are going on the pod, checking her EMR in-box, making outgoing phone calls or taking incoming calls. At Clinica, RNs do not work as chronic care managers because they do not have time. For less complex patients, the pod's case manager assumes that function, and for more complex patients the task remains largely with the provider.

Case manager role

Case managers could also be called health coaches and navigators. They meet with patients with chronic conditions, doing patient education and smoking cessation counseling, providing health-related resources, and collaboratively setting goals and action plans with patients. In the twice-daily huddle, or in the provider visit, patients are identified who need a planned visit with the case manager. These visits ideally take place immediately after the provider visit. Because case managers are on the pod, they often hear or see things—for example, an overweight or obese patient or a patient with diabetes whose HbA1c is high on point-of-care testing—that indicate the need for case manager services that day. A case manager might spend from 5 to 30 minutes with a patient.

Clinica has created a self-management support template on the NextGen EMR, which case managers use for almost every patient. The template includes the patient's goal, the name of the patient's support person, the level of importance (0-10) the patient places on healthy behavior change, the specific action plan, the patient's level of confidence (0-10) in being able to achieve the action plan and the goal, and the barriers the patient anticipates. The case manager prints the action plan for the patient on a form that allows the patient to write how well he/she implemented the action plan each day.

The percentage of patients with diabetes who set goals has improved from 28 to 46% and continues to improve as the case managers place a priority on goal setting.

The EMR has the capacity to print out an after-visit summary, but for some patients with low literacy this summary is not so helpful unless the case manager reviews it with the patient. For patients who want the summary, the provider reviews it with the patient; in the future Clinica would like to have more case managers with one of their functions being to make sure that patients understand the care plan provided in the after-visit summary.

Behavioral health integration

Clinica has integrated behavioral health into primary care, with one behavioral health professional (licensed clinical social worker, psychologist, or licensed professional counselor) per pod. Behavioral health professionals (BHPs) have some 30-40 minute appointments, but are available much of the time for warm handoffs—providers introducing patients to the BHP who conducts a 10-15 minute unscheduled visit done in the exam room after the provider visit. Warm handoffs may be planned during the morning or afternoon huddle or may take place when the provider uncovers a behavioral health problem. Common issues are depression, anxiety, and psychosocial problems. Like case managers, BHPs work with patients on goal setting and action plans. MAs taking patients' history may uncover depression symptoms and do the PHQ-9

depression screening questionnaire, and then contact the BHP, who would follow patients with positive depression screens over time by phone or follow-up visit. Providers would be involved if medications are indicated. Not all patients are screened for depression, but all postpartum women are screened. BHPs also have English and Spanish group visits for patients with anxiety, 1½ hour sessions for 6 weeks. Under the payment guidelines for federally qualified health centers, a BHP visit can be billed, but a provider and BHP visit on the same day can be billed only once. A psychiatrist comes to Clinica 2 days per month, each day seeing 3 new patients and 4 follow-ups in addition to consulting with providers and BHPs.

Front desk

Each pod has its own front desk staff, though they are generally situated between the pod space and the pod's waiting area. The front desk does not handle telephones, which are separated from the pods in the call center; the absence of constantly ringing phones contributes to the calm atmosphere at Clinica. Front desk staff check patients in, collect copays before the visit (uninsured patients are on a sliding scale), and may make follow-up appointments though MAs often perform that function during their post-visit. Front desk staff also make confirmation calls to remind patients of appointments, call to inform patients of normal lab or x-ray results, and comb lists and registries to do outreach panel management calls to remind patients with care gaps (see below under panel management).

Referrals

Each of the four Clinica sites has at least one referral coordinator, whose job is to arrange and track specialty and imaging referrals. Referrals are a challenge for Clinica because few specialists will accept Medicaid and fewer will take uninsured patients. Referral coordinators have a database of these specialists, arrange appointments, send clinical information to the specialist, inform the patient, and track in the EMR whether the referral was made, appointment kept, and specialty consultation referral letter returned to Clinica. A tracking report is run every week and if no consultation letter has arrived, the referral coordinator follows up to determine if the patient no-showed or if the letter has not yet been sent. Clinica does not arrange for referrals for patients who request referrals but whose providers do not feel that specialty care or imaging is indicated. A similar tracking program has been implemented for laboratory results.

Group Visits

Group visits are a central feature of care at Clinica, with well-designed group visit rooms at every site. Group visits are offered for prenatal care, well-child care, diabetes, chronic pain, cold/flu, allergy, anxiety, and other chronic conditions. Patients always have the option of receiving care in a group or one-on-one.

Different groups are led by different staff people—MA, RN, BHP, case manager—with a provider present in the group for most of the time. Each type of group visit has clear protocols and delineation of responsibilities and an established length (generally 1 or 1½ hours). The scheduling of personnel for group visits is carefully meshed with the one-on-one pod schedules. Because providers spend some time with each group visit patient, the group visits are billable. A small exam room is available to the side of each group visit space for care requiring privacy.

An initial prenatal group is offered in English and Spanish to bring newly diagnosed pregnant women into care as early in their pregnancy as possible. Currently, 80% of women at Clinica receive their first prenatal visit during the first trimester, up from 30% in the past; this statistic is associated with better pregnancy outcomes. Clinica providers—with obstetric backup—deliver about 2,000 babies each year (almost six per day).

Following the initial prenatal group, pregnant women can choose to receive their prenatal care in a Centering Pregnancy group or one-on-one. Well child care can be done in a Centering Parenting group or one-on-one. For the Clinica's Pecos site, 10% all care and 14% of prenatal care takes place in groups. The Pecos site does 850 group visits per year (between 2 and 3 each day). During the time that providers are seeing patients in groups, they are 30-40% more productive (patients seen per hour) than seeing patients one-on-one. Thus groups are good not only for patients, who interact with other patients like themselves, but also for Clinica financially.

Pharmacy

Two of the four Clinica sites have full-service pharmacies. For patients at the other 2 sites, medications are sent by courier. Medications are sold at cost plus a \$12 dispensing fee, with a sliding scale for very low-income families. Clinica receives pharmacy assistance from University of Colorado pharmacy students and some PharmD residents. Sometime in the future, Clinica would like to place pharmacists on the pods.

Dental

Two Clinica sites have dental suites with dentists, hygienists, and dental assistants. Clinica provides fillings and comprehensive dental exams, and acute care for dental emergencies, but its priority is prevention, especially for the three groups covered by Colorado Medicaid: children, pregnant women, and patients with diabetes.

Panel Management

Clinica has set up systems to improve the chronic and preventive care not only of its patients who come for appointments, but for all patients empaneled to Clinica's sites, pods, and providers. This is done by providing outreach to patients who are overdue for periodic services recommended by well-accepted clinical practice guidelines, for example, women between 50 and 75 years who have not had a mammogram in the past two years or patients with poorly controlled diabetes who have not had an HbA1c lab test in the past 3 months. This activity is known as panel management—managing the care of Clinica's panels of patients.

Outreach is done by making reminder phone calls to patients with care gaps, meaning patients overdue for a guideline-recommended service. Outreach could be performed with mailings, but in the low-income population served by Clinica, letters are relatively ineffective in reaching people. Cell phones work better. Outreach calls are entered into the registry and tracked. Pod members share the outreach work—some calls are done by the front desk, others by case managers, others by BHPs. The patients needing outreach are identified through Clinica's many registries and lists.

Registries are lists of patients with a particular chronic condition (Clinica has registries for ADHD, anti-coagulation, asthma, chronic pain, depression, diabetes, abnormal Pap tests, and hypertension) or a life situation requiring monitoring (prenatal care and parenting). Registries include patients' demographic information and clinical data, including the dates when each indicated test or service was last done, with prompts indicating what is overdue. Clinical practice guidelines are embedded into the registries. Lists are simpler; for example, a mammogram list includes all patients overdue for the mammogram. The designated pod member responsible for outreach to patients identified on the registries and lists as having care gaps calls those patients to close the care gap. Providers are not involved in this routine work, thereby freeing up more time for providers to address patients' acute complaints and complex management issues. Currently, Clinica's IT department is working to unify the disease-specific registries into one large registry. Clinica does prioritize which care gaps are addressed since there is not time for outreach to every patient overdue for a service.

Panel management can also be done through in-reach, meaning that care gaps are addressed when patients come to the clinic. Clinica's NextGen EMR does have a health maintenance screen that shows care gaps in red; thus far MAs and case managers are regularly not using that screen to address care gaps when patients come to the clinic. Clinica is hoping to add in-reach to its panel management activities at some point in the future.

Complex care management

In most health care organizations 10% of patients incur about 70% of health care costs; these are usually patients with several chronic physical and mental health conditions who frequently use the emergency department and are admitted to the hospital. It is widely believed that with excellent primary care, many of these emergency department and hospital costs could be avoided, and Clinica is well situated to reduce these costs.

Clinica has plans to devote more resources to these patients by increasing the number of case managers and focusing on prompt follow-up for patients seen in the emergency department or discharged from the hospital. A pilot program for complex care management is starting with a Colorado Medicaid Accountable Care Collaborative.

EMR Implementation

Clinica adopted the NextGen electronic medical record in 2006. No one at Clinica would ever imagine going back to paper charts; the EMR has been a key contributor to the improvements in Clinica's workflows. When Clinica made the transition from paper to electronic records, only a small amount of data was transferred to the EMR: diagnoses, medications, allergies, and immunizations. As providers saw patients, they could flag other pieces of information they wanted in the EMR, for example, lab results, imaging reports, patient consents, advance directives, hospital discharge summaries, and specialty consults. These could be scanned, but more commonly providers would highlight the key conclusions of these reports and indicate where in the EMR the information should go, and medical records personnel would input the information. If a paper chart has not been pulled for 18 months, it is sent to storage.

Clinica wisely kept its medical records staff, who now work on each pod to input information requested by providers. Because many institutions with which Clinica interacts are not

electronic, a large amount of paper continues to enter Clinica and medical records personnel are needed to input provider-highlighted information.

With its disease-specific templates for conditions commonly seen at Clinica, and its decision support tools which make clinical practice guidelines quickly available to providers, the EMR has helped to standardize how common conditions are handled by Clinica's providers and care teams. Some practice guidelines were written by Clinica's physician leaders; others are available from Colorado HealthTeamWorks, which has developed a rigorous process for writing, approving, and disseminating guidelines.

Clinica is currently initiating a web portal so that patients and care team members can communicate electronically, which is expected to streamline care for those patients with access to computers.

Creating Workflows

Every process in primary care has an invisible or visible workflow: what are the steps in the process, who does each step, and how do the steps fit together to make the process function smoothly? Clinica has tried to make hundreds of workflows, which naturally changed after EMR adoption, as visible as possible to every person working in the organization.

Creating smooth workflows is a long, slow journey, in part because primary care is composed of so many specific workflows. Take incoming phone calls as an example. Who receives the call, what script is used to answer the call, and how are emergent, urgent, and non-urgent requests handled? What can be handled by the call center attendant, what needs to be referred to the RN (which ones by phone, which by e-mail), or to someone else? If the call is for an appointment how is that appointment made, how is the call documented, and how is the quality of the call (how long the phone rang before being picked up, how satisfied was the caller) measured and how were those measurements entered into the clinic's database? Multiply the steps in that workflow by the hundreds of workflows taking place in primary care; improve, try out, improve again, spread, and make visible and provide training on each step of each workflow: one can begin to appreciate how much effort is involved in elevating a clinic to a high level of efficiency and quality.

Not only does each clinic function (e.g., managing the appointment template to ensure prompt access, optimizing continuity, drawing blood, reviewing lab results, refilling prescriptions, and on and on and on) require workflow design, but for a couple of dozen common primary care clinical conditions, visible workflows are needed (e.g., for diabetes, creating the EMR template for the MA to follow, deciding who does foot exams, eye exams, HbA1c lab tests, who and how the diabetes registry is managed, which medications are available in the pharmacy, who does patient education and activation and how it is done, how and how often and by whom diabetes care is measured and discussed among the clinic staff, to mention a few of the many steps required).

Clinica has created, tested, improved, and implemented hundreds of workflow redesigns, taking one workflow at a time, requiring years of continuous improvement that never ends. Yet Clinica has found that the very act of improving a workflow, which needs to involve everyone taking part in that workflow, builds teamwork and makes visible how each person's job interacts with

the job of one's teammates and reveals the part that each person plays in providing care to Clinica's patients.

Performance Data

For many years, Clinica has kept run charts that demonstrate how the organization as a whole, each site, each pod, and each provider has performed on a number of metrics. Moreover, a databoard on the wall of each pod shows everyone whether or not performance has reached Clinica-set goals and where improvement is needed. The databoards are updated every couple of weeks with metrics such as continuity of care, documentation of smoking status, percentage of smokers receiving counseling, and process and outcome measures associated with diabetes, hypertension, prenatal care, and other conditions. The twice-daily huddles are used to discuss areas needing improvement. Clinica is a data-driven organization.

		2006	2008	2010	YTD 2011	HEDIS Medicaid	
Continuity for Patients with Diabetes	PCP	58.00%	63.25%	69.07%		83.40%	
	Team	82.00%	78.75%	84.75%			
Access	Time to Third Available Appointment (Days)	6	4.9	4	3.6		
Prenatal	Trimester of Entry to Care (Patients Entering Care in 1st Trimester)	66.00%	58.95%	79.69%	82.74%		
	Low Birth Weight	6.07%	5.93%	6.00%	5.57%		
	C-section rates		20.34%	20.25%	20.40%		
	Pap Test in Last 3 Years (Women age 24-64)		76.51%	82.87%	83.76%		
	2 Year Old Immunizations		62.52%	81.30%	91.84%		
	Diabetes Patients with A1c < 7%		33.86%	39.92%	41.32%		33.90%
	Diabetes Patients with A1c > 9%		21.81%	20.67%	22.71%		44.90%
	Hypertension Patients with BP <140/90		56.40%	67.38%	67.69%	59.80%	

Total number of medical visits for 2010 was 145,596.

HEDIS Medicaid is the average score for all Medicaid health plans in the US in 2009 (www.ncqa.org).

National data on % of births with low birth weight for Hispanics in 2008 = 7.0%.

National C-section rate among US Hispanics 2007 = 30%.

NCQA medical home accreditation

Community health centers across the United States are debating whether to seek NCQA designation as a patient-centered medical home. In some states, such designation brings increased revenue, in others not. Clinica decided to become NCQA accredited even without the payment incentive, feeling that the exercise of gaining designation forces a primary care practice

to think about the areas in which improvement is needed. For Clinica, accreditation was simple because all NCQA elements were already in place.

Pay for performance

From 2003 to 2007, Clinica utilized a pay-for-performance system. The clinic did not receive additional external payments for high quality; rather the organization held some of its revenues in a pool to create internal incentives for improvement. In contrast with most organizations that bonus only providers for improved performance, Clinica gave bonuses to every person on high-performing pods, thereby demonstrating that improvement is made possible by the efforts of the team, not only the provider. Recently, Clinica put a hold on its pay-for-performance system because of debate whether the pod-level data is sufficiently accurate. Discussions of the effectiveness of financial incentives are ongoing.

Financing Clinica

Clinica, like all community health centers in the United States, has a complex system of financing. As a federally qualified health center (FQHC), Clinica receives an enhanced payment for Medicaid because FQHCs are required to care for the uninsured, and the Medicaid payments provide funds that help to offset the losses incurred in caring for the uninsured. In addition, Clinica has received Public Health Service Act Section 330 grants, raises funds from local foundations and benefactors, collects sliding-scale payments from some uninsured patients, and benefited for years from the Colorado tobacco tax moneys. In the changing world of post-Accountable Care Act politics combined with federal and state budget crises, Clinica joins all community health centers in navigating through an uncertain world.

Learning From Clinica

Clinica has solved many of the problems facing primary care clinics and practices, and continues to confront the challenges that still remain. For clinics and practices whose improvement journey began later than that of Clinica, Clinica has much to teach. Why was continuity of care made the centerpiece? How was prompt access achieved and sustained for so many years? Who should be on care teams, how many of each job category, what are their job roles, what are the workflows, and why is co-location such an important feature of a successful care team? How is care for each common condition provided? How does care become a shared responsibility of all care team members rather than the sole responsibility of providers, and how does the shift from provider to team improve the quality of care for patients and the work life of clinic personnel? How is population-based care carried out, and measured, and how does data drive improvement? No clinics or practices will blindly copy Clinica's answers to these questions, but all can learn from Clinica's leadership.

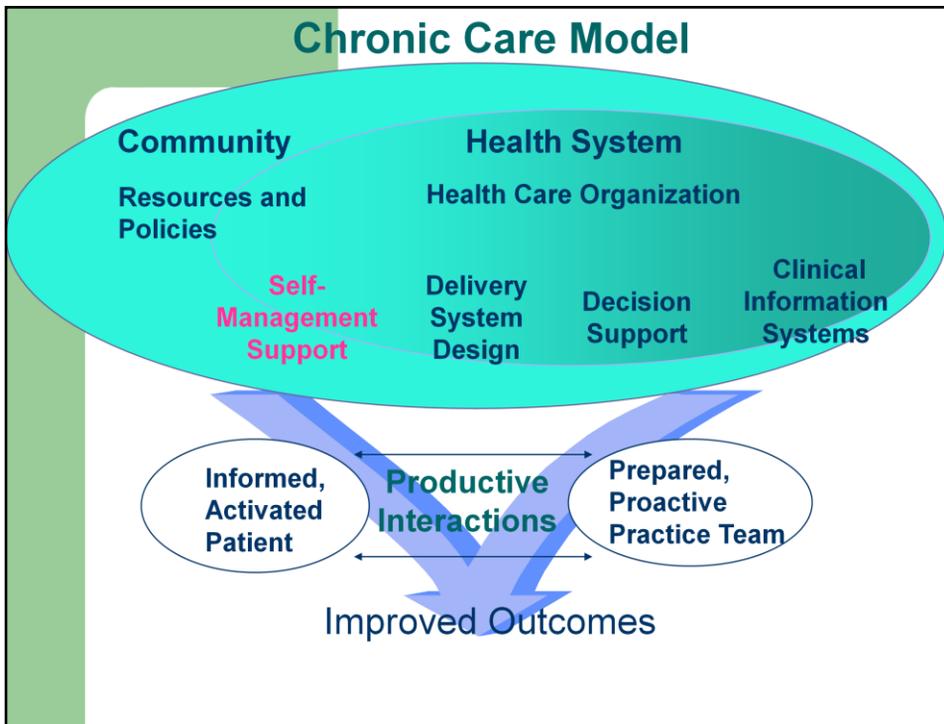


Using Self-Management Support In Your Coaching Approach

Mike Hindmarsh
Hindsight Healthcare Strategies

QIIP Practice Facilitator Training
May 12-13, 2008
Toronto, ON





You are here.

Wagner EH, Davis C, Schaefer J, Von Korff M, Austin B. A survey of leading chronic disease management programs: Are they consistent with the literature? *Managed Care Quarterly*. 1999;7(3):56-66.

Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA* 2002 Oct 16; 288(15):1909-14.

Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A., Improving chronic illness care: translating evidence into action. *Health Aff (Millwood)*. 2001 Nov-Dec;20(6):64-78.

Self-Management Support

- Emphasize the patient's central role in managing their illness
- Use effective self-management strategies that include assessment, goal-setting, action planning problem-solving and follow-up.
- Organize internal and community resources to provide ongoing self-management support to patients.

Bodenheimer, Lorig, Holman, and Grumbach Patient self-management of chronic disease in primary care. JAMA 2002;288:2469-2475

Glasgow, Davis, Funnell and Beck, in submission

Whitlock et al Evaluating primary care behavioral counseling interventions: an evidence-based approach

<http://www.ahrq.gov/clinic/3rduspstf/behavior/behsum1.htm>

What is self-management?

“The individual’s ability to manage the symptoms, treatment, physical and social consequences and lifestyle changes inherent in living with a chronic condition.”

Barlow et al, Patient Educ Couns 2002;48:177

Barlow goes on to say:

Efficacious self-management encompasses ability to monitor the condition and to effect cognitive, behavioral and emotional responses necessary to maintain a satisfactory quality of life.

It is a dynamic, continuous process of self-regulation.

Patient educ. vs. SMS

- Information and skills are taught
- Usually disease-specific
- Assumes that knowledge creates behavior change
- Goal is compliance
- Health care professionals are the teachers
- Skills to solve pt. Identified problems are taught
- Skills are generalizable
- Assumes that confidence yields better outcomes
- Goal is increased self-efficacy
- Teachers can be professionals or peers

Both patient education and SMS are necessary.

Some aspects of patient education work well, some do not. Information is necessary and skills must be taught.

Knowledge does not create behavior change, and compliance is not a useful goal.

Adapted from Bodenheimer, JAMA 2002;288:2469

Norris et al. Effectiveness of self-management training in type 2 diabetes, Diabetes Care 2001;24:561-587.

Self-Management Tasks in Chronic Illness

- To take care of the illness
- To carry out normal activities
- To manage emotional changes

Based on work by Corbin and Straus

Take care of illness means handling medical management such as taking medication, changing diet, or self-monitoring.

Carrying out normal activities means creating and maintaining life roles, such as job, family, friends (how do I manage working night shift with diabetes? How do I play soccer and keep my asthma in control?)

Emotional changes are most frequently anger, fear and frustration, often depression. Changes view of future and relationships with others.

When you are interacting with a patient, or designing a system to support self-management, consider if you have touched on every task.

Corbin J, Strauss A. Unending work and care: managing chronic illness at home. San Francisco, Jossey Bass, 1988

Collaborative care

“If physicians view themselves as experts whose job is to get patients to behave in ways that reflect that expertise, both will continue to be frustrated... Once physicians recognize patients as experts on their own lives, they can add their medical expertise to what patients know about themselves to create a plan that will help patients achieve their goals.”

Funnell & Anderson JAMA 2000;284:1709

This describes the patient empowerment philosophy.

Need interaction of clinician's ideas and patient's ideas.

Professionals may blame pts for poor outcomes, attribute it to noncompliance, denial.

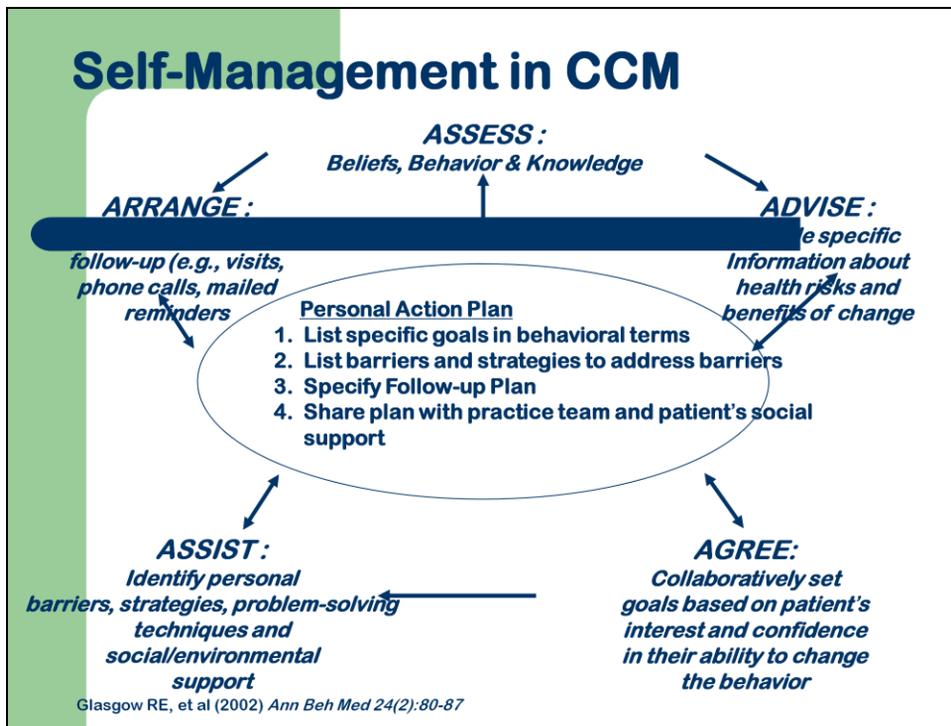
If we accept that pts define their problems, compliance and adherence aren't relevant concepts.

What self-management support isn't...

- Didactic interaction
- Sage on the stage
- You should...
- Finger wagging
- Lecturing
- Waiting for patients to ask for help

Not sage on the stage, but the guide on the side (Karen Artz)

Source: ICIC



One way to make sure that you are using effective strategies is to incorporate the 5 A's into care.

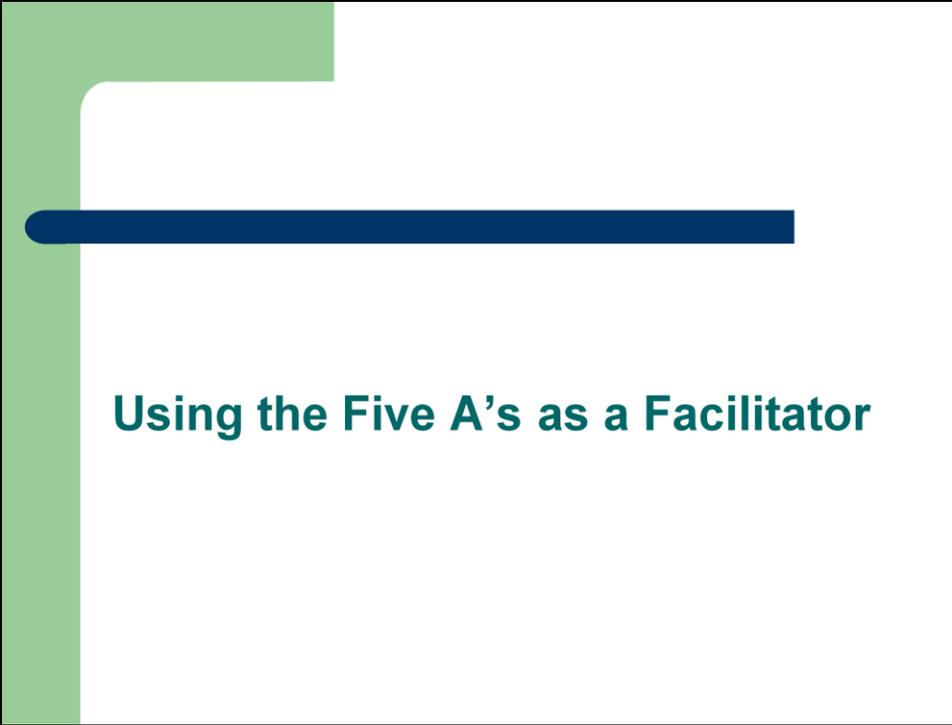
Assess, Advise, Agree, Assist, Arrange.

This diagram draws on the 5 A's that some of you may be familiar with from smoking cessation brief counseling.

(Start at the top and go around the figure, reviewing each A.)

The central activity is the creation of a Personal Action Plan.

Glasgow RE, et al (2002) *Ann Beh Med* 24(2):80-87



Using the Five A's as a Facilitator



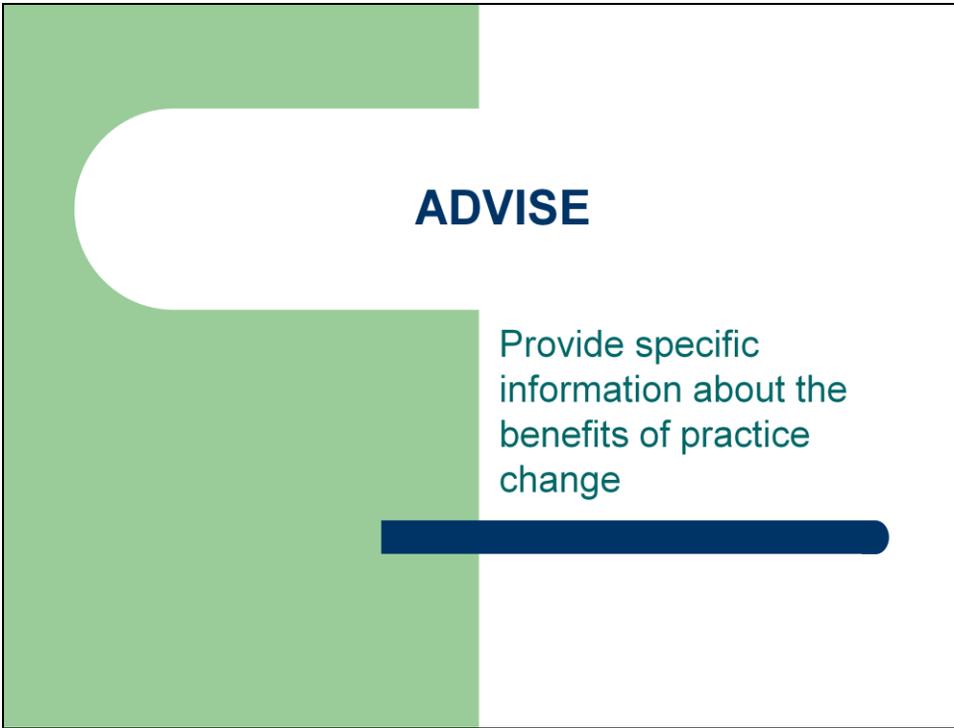
Now we will look at each of the A's in succession. They will help us organize our efforts in self-management support.

Tips on assessing your practice team

- Ask questions about them...get to “know” them
- Provide feedback to team when appropriate
- Assess their view of QI progress and how easy/difficult it is to get things done.

Here are some tips to consider during assessment.

Many of the patient choices are behaviors, but some are also attitudes about their illness.



The second A is Advise.

Tips on providing advice

- Make the source of advice clear (medical knowledge or best practice)
- Personalize advice to the FHT/CHC environment
- Listen more than you talk
- Have a key message for each idea you present
- Don't overwhelm them with information

It is important to clarify what kind of information you are providing. Regarding clinical care, remember techniques from shared decision making. If it is in relation to some lifestyle decision, patients like to hear information from patients like them.

There is much evidence that supports the power of physician advice. (see Whitlock for refs)

One example of personalizing lab values is to graph them. For people with diabetes, draw a body with areas to put in their HbA1c, BP, microalbumin, eye exam, etc. Help patients understand how their choices influence their health status, for example how regular exercise contributes to better function for people with arthritis, or how trying new things contributes to a sense of confidence.

Source, Glasgow et al in submission



The third A is Agree.

Tips to create agreement

- Base goals and measures and team's priorities
- Let them start where they want
- Do not judge ideas for change
- Do not make them agree with you
- Team consensus on testing ideas is not critical unless there is obvious opposition or discomfort

Remember the goal is the patient's and we want them to be successful. Often the goal or plan does not seem related to the chronic illness from our point of view, but to the patient they make sense. Sometimes patients choose something small or apparently peripheral to do, but with success, they will take on more challenging and specific things to try.

Source, Glasgow et al in submission

ASSIST

Using behavior change techniques (problem solving, counseling) to aid the team in acquiring skills, confidence to test ideas quickly.

Agree and assist are the steps that lead to the creation of a personal action plan.

Tips on assisting patients

- Use other teams as examples
- Address helplessness
- Learn and use a problem-solving approach
- Link to the assessment of barriers and environment
- Avoid telling them what to do
- Avoid speeches
- Avoid cheerleading

Problem Solving

1. Identify the problem.
2. List all possible solutions.
3. Pick one.
4. Try it in the next testing cycle.
5. If it doesn't work, try another.
6. If that doesn't work, find a resource for ideas.
7. If that doesn't work, accept that the problem may not be solvable now.

This is a very straightforward problem solving approach, which is used in many successful self-management programs. It can be done individually or as a group.

The first step may be tricky. If the patient can't think of ideas for the second step, ask them if they would like ideas from other patients like them. Check up on their progress.

From Kate Lorig, Chronic Disease Self-management program

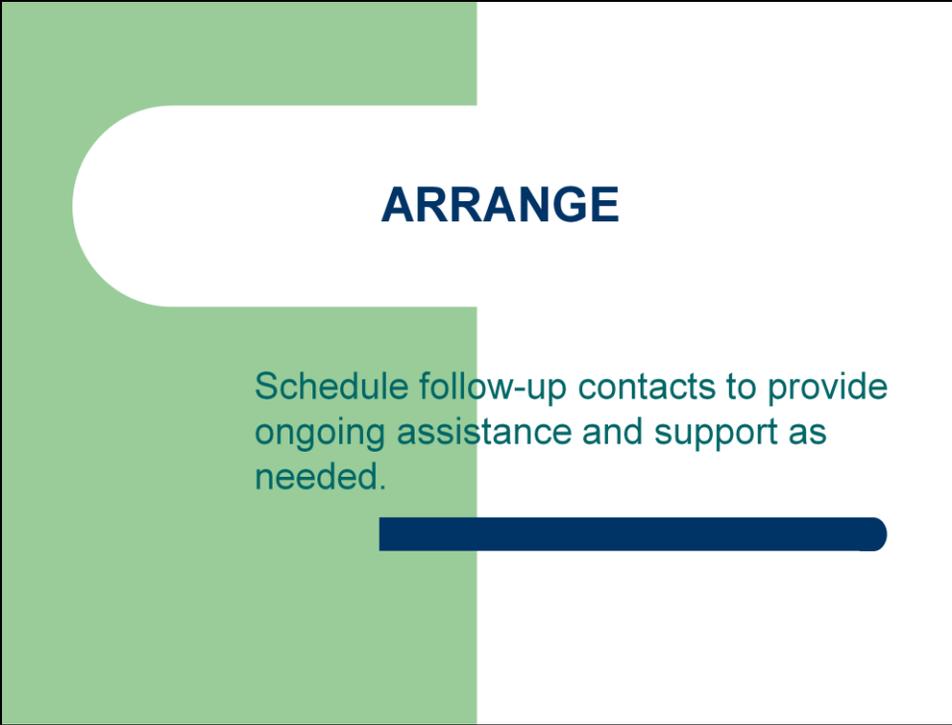
Lorig K, Holman, H, Sobel D et al Living a Healthy Life with Chronic Conditions 2 ed, Palo Alto, Bull publishing, 2001

Thoughts on Team QI Literacy

- People can read and function above their cognitive level on topics that interest them
- People are very sensitive about being talked down to.
- Be cognizant of power inequities among team members

Key point is to give patients a choice on whether or not they want written material and to have options

From an email response of Kate Lorig to leaders of the CDSMP program, Sep 2002



ARRANGE

Schedule follow-up contacts to provide ongoing assistance and support as needed.



The final A

Whitlock et al

Tips for follow-up

- Try a wide variety of methods, whichever team prefers (in person, phone, email)
- Make sure follow-up happens, team trust can be destroyed by missed follow-up
- Determine follow-up based on team preference

Glasgow et al in press.

Efficacy of other methods Whitlock et al Evaluating primary care behavioral counseling interventions: an evidence-based approach

<http://www.ahrq.gov/clinic/3rduspstf/behavior/behsum1.htm>

Personal Action Plan

1. Something you WANT to do
2. Describe
 - How
 - What
 - When
 - Where
 - Frequency
3. Barriers
4. Plans to overcome barriers
5. Confidence rating (1-10)
6. Follow-Up plan

Source: Lorig et al, 2001

This is the center of the diagram.

Goals are too big to work on all at once, and need to be broken down into steps. Action plans should be made for 1-2 week periods of time.

Need to be behavior-specific (someone could observe them doing it).

Confidence see next slide. Confidence is behavior specific. Can be very confident can take meds, but not confident can avoid salt at the church pot-luck if have CHF.

Follow up may be in person, on phone, email. Important to follow-up!!!

(From Kate Lorig, Chronic Disease Self-management program

Lorig K, Holman, H, Sobel D et al Living a Healthy Life with Chronic Conditions 2 ed, Palo Alto, Bull publishing, 2001

Confidence Ruler



People can quickly learn to gauge their confidence.

You can ask, how confident are you that you can complete the entire plan we just set?

If their confidence is less than 7, look at the plan more closely. It is more important for patients to succeed than to have an ambitious plan. Review all the steps. Sometimes the confidence is low because the plan is not something that the patient wants to do. Sometimes they have been overly ambitious with the plan and chosen too much or too often. Remind the patient that they can always do more.



For More Information on Self-management Support



www.improvingchroniccare.org

thanks

Module 4: Approaches to Quality Improvement

PDSA Worksheet for Testing Change

Aim: (overall goal you wish to achieve)

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do

Describe what actually happened when you ran the test

Study

Describe the measured results and how they compared to the predictions

Act

Describe what modifications to the plan will be made for the next cycle from what you learned



A Guide on Workflow Mapping

LA Net Community Health Resource Network
A Practice Based Resource Network

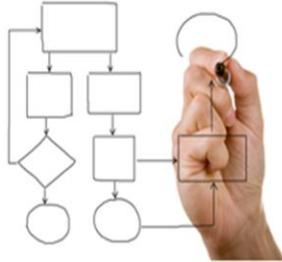
This is an introductory course on workflow mapping. This session is meant to provide basic knowledge in workflow mapping, while demystifying the process.

Learning Objectives

- Identify the three types of flowcharts
- Explain the use for flowcharts
- Apply the 6 steps used to produce a flowchart
- Evaluate an organizational process using your flowchart



Workflow Mapping



- Workflow maps are also referred to as flowcharts, flow maps, flow diagrams, flow sheets, and process maps
- A workflow map is defined as a visual representation of a process
- A process considers a sequence of operations with a start and end point



Use for Workflow Maps

- To map current practice flow
Are we really doing what we say we do?
- Begin to identify areas for process improvement
- Visual aid and representation of roles and responsibilities
- Add-on to an organization's policies and procedures
- Process maintenance

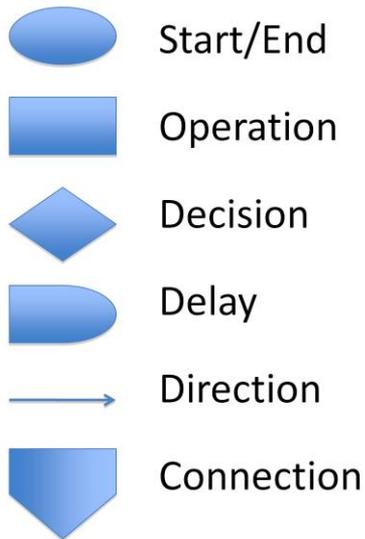


Types of Flowcharts

1. **High-Level flowchart**: is a diagram that provides a brief overview of a process only highlighting major events in the process
2. **Detailed flowchart**: is a map that marks every step in a process, which includes decision points, waiting periods, and feedback loops
3. **Swimlane flowchart**: is a map that displays processes carried out for multiple roles across multiple stages



Common Symbols



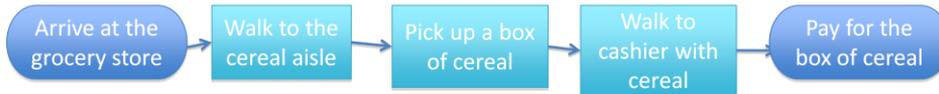
Become familiar with the following symbols. Your team will want to construct its workflow diagram to include these. The symbols offer an immediate visual representation of: start/end, decision point, delay, and direction.

- 1) Indicates the start or end of a process
- 2) A specific task or activity performed
- 3) A point in the process where a decision needs to be made to determine the path in the process
- 4) Indicates a point in the process where there is delay or wait in line
- 5) Arrows indicate the direction of flow
- 6) Use this as a cross reference from a process on another page

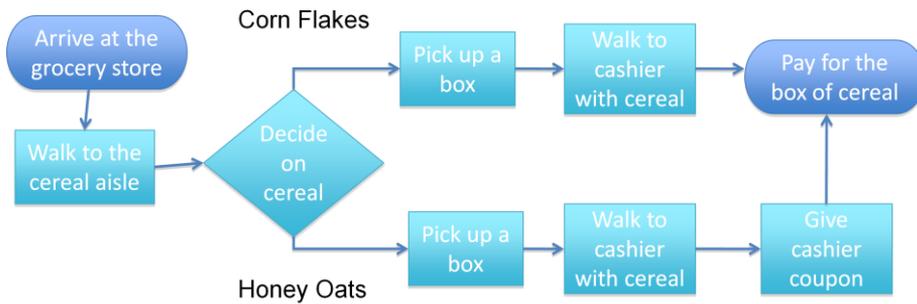
What it looks like

Example: The process of buying a box of cereal.

High-Level Flowchart

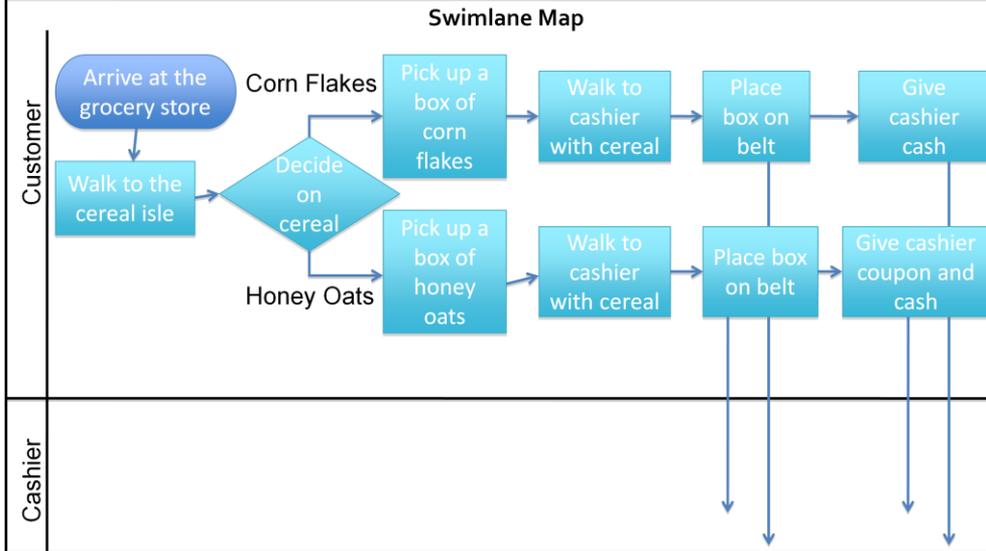


Detailed Flowchart



What it looks like

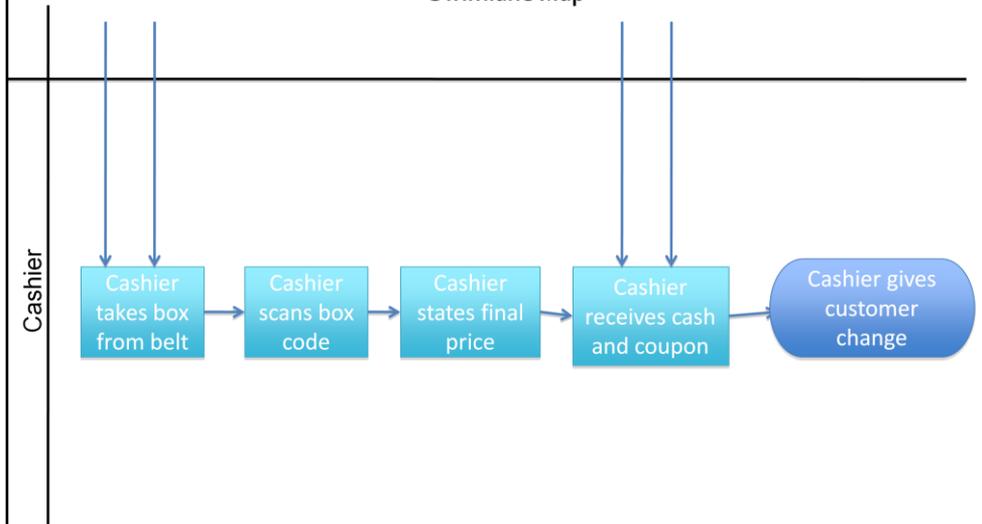
Example: The process of buying a box of cereal.

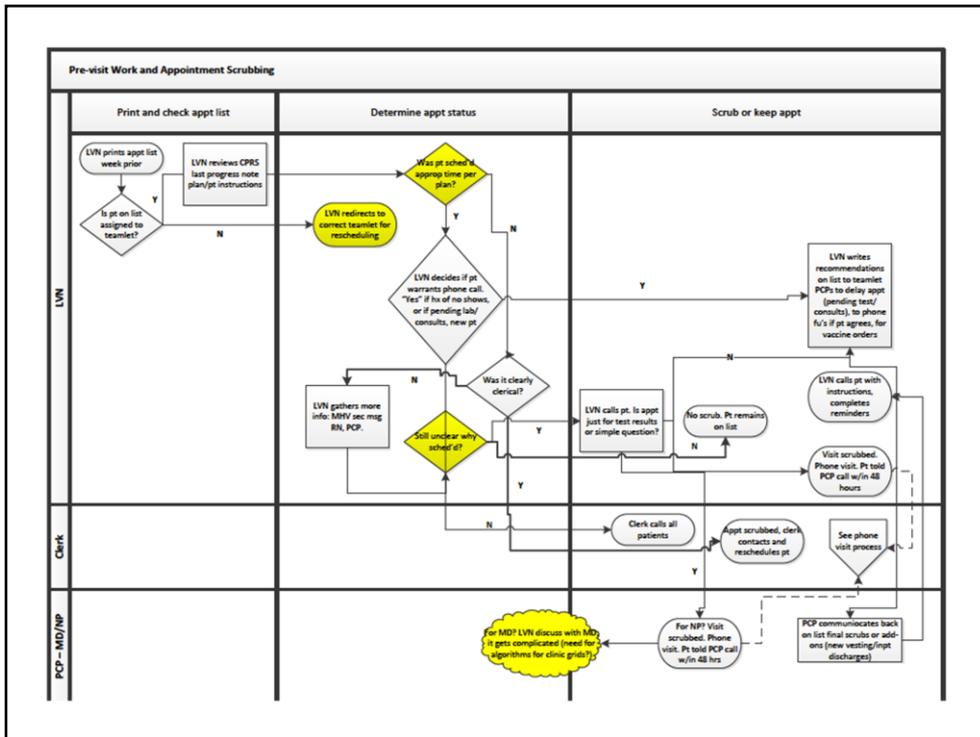


What it looks like

Example: The process of buying a box of cereal.

Swimlane Map





This is an example of what is referred to as a “swim lane map.” A swim lane map displays processes that are carried out for multiple roles across multiple stages.

Each swim lane is representative of a role, in this case: PCP, Clerk, LVN.

The stretch of each lane is marked by the stages in the process. Here they are marked in the following order: 1) Appointment list review, 2) Appointment status, 3) scrubbing

Who is involved?

Involve all those who play a part in the process.

Tips:

- Start with a small group if it's a challenge to start with the entire group
- Pick a champion for this group
- Be sure to have all materials on-hand
- Provide the team with an overview of what the mapping process looks like
- Clearly state the objective and process selected for this exercise



The 6-Step Process

Step 1: Identify a process to map (use the Know Your Process template)

Step 2: Begin with a high-level flowchart

Step 3: Move into a detailed flowchart

Step 4: Walk through the process once or twice

Step 5: Validate the maps to ensure they truly reflect the current process

Step 6: Identify quick fixes and distinguish them from larger fixes (use LA Net's Impact & Complexity Grid)

(REMEMBER: A flowchart captures the process AS IS, not how it is supposed to be)



After Step 6 Your next step will be to PDSA one of the identified fixes for improvement

Step 1: agree on a process to map: (HAVE A PLAN) Consider surveying your staff, patients, or others on which processes are the biggest problems Process that are the most time consuming, most labor-intensive, have the most complaints, etc.

Refer to your “Know Your Processes” assessment template for guidance.

Step 2: agree on a beginning and end IMPORTANT when you start high-level flowchart

Know Your Process Template

12 Know Your Processes- Practice Core and Supporting Processes Assessment: Ask each member of the staff to rate the core and supporting processes using this worksheet. Based on these findings, staff members choose what to work on improving. Rate each process by putting a tic mark under the heading which most closely matches your understanding of the process. Also mark if the process is a source of patient complaints. (See Appendix, page A14-A16 for the Pareto worksheet and example to help you analyze the data.)
Steps for Improvement: Each of the processes below should be flowcharted in their current state. Explore improvements for each process based on the outcomes of the assessment tool. Once you have flowcharted the current state of your processes and determined your change ideas use the PDSA Cycle Worksheet on page 26 to run tests of change and to measure. The collection of flowcharts will create your Practice Playbook (see page 29).

Processes	Works Well	Not a Problem	Small Problem	Real Problem	Totally Broken	Cannot Rate	We're Working On It	Source of Patient Complaint
Answering phones								
Appointment system								
Messaging								
Scheduling procedures								
Reporting diagnostic test results								
Prescription renewals								
Making referrals								
Pre-authorization for services								
Billing/Coding								
Phone advice								
Assignment of patients to your practice								
Orientation of patients to your practice								
New patient work ups								
Education for patients/families								
Prevention assessment/activities								
Chronic disease management								

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Rev: 03/22/04

Ask each member of the staff to rate the core and supporting processes using this worksheet.

Based on these findings, staff members chose what to work on improving.

Rate each process by putting a tic mark under the heading which most closely matches your understanding of the process.

Impact & Complexity Grid

- Build Complexity:

- ✓ Low Complexity/High Impact
- ✓ Low Complexity/Low Impact

- Next Stage:

- ✓ High Complexity/High Impact

- Avoid Option #4:

- High Complexity/Low Impact

	Low Impact	High Impact
High Complexity	High Complexity/Low Impact (Option #4)	High Complexity/High Impact (Option #3)
Low Complexity	Low Complexity/Low Impact (Option #2)	Low Complexity/High Impact (Option #1)



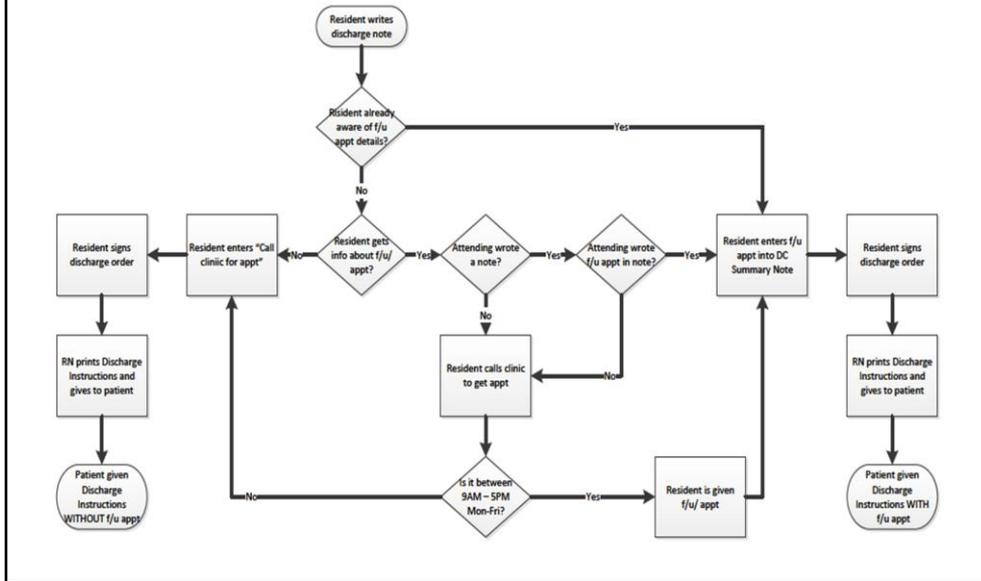
6/20/2013

Give 2 examples from needs assessment to conduct

DO NOT USE WITH TEAMLET. Only one right answer. The reason we are showing this to you, is for you to use it and select low complexity processes. If for some reason, you have a highly functional team, then you might consider jumping into a higher complexity process. But what you do not want is taking on if not ready. Digest this.

To be successful, build hope that they can change something. IC should know that not all processes are created equal. Your job as an IC is to help teams

Scheduling PCP Follow-up Appointments for Patients Prior to Hospital Discharge



How to Analyze my Map

You can use your process map to assess problem areas or potential areas for improvement by examining some of the following:

- ✓ Bottlenecks and other sources of delay
- ✓ Rework due to errors
- ✓ Role ambiguity
- ✓ Duplicated efforts
- ✓ Unnecessary steps
- ✓ Sources of waste
- ✓ Variation
- ✓ Hand-offs



Tips on Mapping

- Be sure to map current process
- Get key players involved and their input
- Recognize that any flowchart will take multiple attempts to complete
- Leverage existing experts and experiences



Workflow Mapping Exercise

- Break into groups of 5 to 6
- Be sure to have:
 - Poster board paper
 - Post-its (or 5x6 index cards)
 - Marker
- Pick a leader and a scribe
- Ground rules:
 - State process: Making coffee
 - Define beginning and end points
 - Assumptions: you already have coffee, a coffee pot, and you do not have a Keurig

Questions to Ask

- Who knows what a workflow map is?
- Who has experience in workflow mapping?
- Did you consider your start and end points?
What were they and how did your team come to this conclusion?
- How did you deal with process agreements/disagreements?
- Did everyone have input? If not, why?

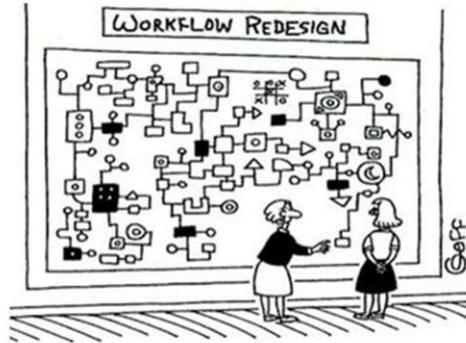
In Conclusion

- The 3 types of flowcharts include: High-level, Detailed, and Swimlane flowcharts
- Flowcharts are used to map current processes, identify barriers and opportunities to increase efficiency, and to train newly hired staff of a process
- There are 6 major steps in mapping a flowchart
- There are a series of questions that need to be discussed after you develop your map that ask about repetition, role maximization, and decision points



Remember

Workflow maps serve as a tool to improve care for patients, improve efficiency in practice, and redistribute work and job responsibilities.



"And this is where our ED workflow redesign team went insane."



Thank You!



LA Net Community Health Resource Network

3940-B East Broadway, Long Beach, CA 90803

Phone: 562.434.2000

www.lanetpbrn.net

Module 6: Assessing Practice Systems

A. Change Process Capability Questionnaire (CPCQ)

How would you describe the approach to quality improvement in your medical group or clinic

	strongly disagree	somewhat disagree	neither agree or disagree	somewhat agree	strongly agree	NA
1. Clinicians in our medical group/clinic believe that high quality care is very important	1	2	3	4	5	8
2. We have greatly improved the quality of care in the past year	1	2	3	4	5	8
3. We choose new processes of care that are more advantageous than the old to everyone involved (patients, clinicians, and our entire medical group/clinic)	1	2	3	4	5	8
4. Our resources (personnel, time, financial) are too tightly limited to improve care quality now	1	2	3	4	5	8
5. Our medical group/clinic operations rely heavily on organized systems	1	2	3	4	5	8
6. The thinking of our leadership is strongly oriented toward systems	1	2	3	4	5	8
7. Our medical group/clinic attaches more priority to quality of care than to finances	1	2	3	4	5	8
8. The clinicians in our medical group/clinic espouse a shared mission and policies	1	2	3	4	5	8
9. The clinicians in our medical group/clinic adhere to medical group/clinic policies	1	2	3	4	5	8
10. Our medical group/clinic leadership is strongly committed to the need for quality improvement and for leading that change	1	2	3	4	5	8
11. Our medical group/clinic has well-developed administrative structures and processes in place to create change	1	2	3	4	5	8
12. Our medical group/clinic is undergoing considerable stress as the result of internal changes	1	2	3	4	5	8

	strongly disagree	somewhat disagree	neither agree or disagree	somewhat agree	strongly agree	NA
13. The working environment in our medical group/clinic is collaborative and cohesive, with shared sense of purpose, cooperation, and willingness to contribute to the common good	1	2	3	4	5	8
14. The clinicians in our medical group/clinic are very interested in improving care quality	1	2	3	4	5	8
15. We have many clinician champions interested in leading the improvement of care quality	1	2	3	4	5	8
16. Our medical group/clinic understands and uses quality improvement skills effectively	1	2	3	4	5	8
17. The leaders of our efforts to improve care quality are enthusiastic about their task	1	2	3	4	5	8
18. Our medical group/clinic has a well-defined quality improvement process for designing and introducing changes in the quality of care	1	2	3	4	5	8

Our medical group/clinic has used the following strategies to implement improved care quality...

	strongly disagree	somewhat disagree	neither agree or disagree	somewhat agree	strongly agree	NA
19. Providing information and skills-training	1	2	3	4	5	8
20. Use of opinion leaders, role modeling, or other vehicles to encourage support for changes	1	2	3	4	5	8
21. Changing or creating systems in the medical group/clinic that make it easier to provide high quality care	1	2	3	4	5	8
22. Removal or reduction of barriers to better quality of care	1	2	3	4	5	8
23. Organizing people into teams focused on accomplishing the change process for improved care	1	2	3	4	5	8
24. Delegating to non-physician staff the responsibility to carry out aspects of care that are normally the responsibility of physicians	1	2	3	4	5	8

	strongly disagree	somewhat disagree	neither agree or disagree	somewhat agree	strongly agree	NA
25. Providing to those who are charged with implementing improved care the power to authorize and make the desired changes	1	2	3	4	5	8
26. Using periodic measurement of care quality for the purpose of assessing compliance with any new approach to care	1	2	3	4	5	8
27. Reporting measurements of individual or care unit performance for comparison with their peers	1	2	3	4	5	8
28. Setting goals and benchmarking rates of performance quality at least yearly	1	2	3	4	5	8
29. Customizing the implementation of any care changes to each site of care	1	2	3	4	5	8
30. Use of rapid cycling, piloting, pre-testing, or other vehicles for reducing the risk of negative results from introducing organization-wide change in care	1	2	3	4	5	8
31. Deliberately designing care improvements so as to make physician participation less work than before	1	2	3	4	5	8
32. Deliberately designing care improvements to make the care process more beneficial to the patient	1	2	3	4	5	8

Module 6: Assessing Practice Systems

B. Case Example

OnlyOneforMiles

The practice OnlyOneforMiles is interested in working with you to implement panel management and to improve their diabetes care. The CMO is excited about the project and responds to your emails to them about the project within a day. You schedule a meeting with him. You ask him to identify key individuals who might participate on the Care Model project team for the intervention period. He says okay. When the day of the meeting comes, Dr. Enthusiasm shows up for the meeting. But no one else is with him. You ask where the others are and he says that everyone was too busy that day to join.

As the two of you visit about project expectations, he mentions that the CEO is not interested in participating and is concerned the project and changes will make the practice lose money. The practice is also implementing its EHR in the next two months and so staff and clinicians are stretched thin. Despite the challenges, the practice is financially fairly stable, and has a low rate of clinician and staff turnover. The practice recently began to transition to care teams from traditional physician-centric models, which has been causing some conflict, but so far things are going okay with that change.

Dr. Enthusiasm is excited about working with you as he thinks it complements the change to care teams and might help improve them. He also thinks that the practice should try to implement panel managers and wants a practice facilitator to help. He wants to know next steps to starting work with you. Dr. Enthusiasm's practice is located in a semi-rural community and is one of the only sources of primary care for low-income patients in the region.

Module 6: Assessing Practice Systems

C. Sample data inventory form

Department:	
Date:	

Information being collected (summary – Optional: attach copy of variables collected to this form)	Source for data	For what patients or activities?	For what purpose? (Fed govt., payer, practice internal QI, other) provide details	Data source/ Method? (Electronic registry (name), paper survey, etc.) Provide name and details	When? (Daily, monthly, quarterly)	Being used in QI or clinical care at practice? Y/N	Location of data and person in charge of data collection?	What information on race/ ethnicity is being collected? (be specific – list variables)	HOW is race/ ethnicity info being collected? (pt completes form, verbal question by receptionist, etc.)
EXAMPLE: Diabetes lab data, PHQ 9 data, visit data	Manual entry from PHQ 9 forms; auto input from billing system; auto input from lab feed	All diabetic patients at practice	Report to County PPP program; BPC disparities collaborative	I2I registry, Excel Spreadsheet	Daily as able	Partial: Patients w/elevated PHQ 9s are flagged on a monthly basis and names are given to director of behavioral health	Computer in main office; Mary Gonzales	Ethnicity: Hispanic/ non-Hispanic Race: Anglo African American Asian Native American	Entered from information provided by patient on "first visit form"

Module 8: Collecting Data With Chart Audits

A. Sample Data Abstraction

Diabetes Chart Audit Form

Practice Site:	Date of Audit:	PF Reviewing:
----------------	----------------	---------------

a	b	c	d	e	f	g	h	i	j
Pt. ID (do not include names)	HbA1c in the past 3 months? 0=NO 1=YES	HbA1c less than 7.0? 0=NO 1=YES	BP documented at last visit? 0=NO 1=YES	BP less than 130/80 mm Hg? 0=NO 1=YES	LDL-C in past 12 months? 0=NO 1=YES	LDL-C less than 100mg/dL? 0=NO 1=YES	Eye exam in the past 12 months? 0=NO 1=YES	Foot exam in the past 12 months? 0=NO 1=YES	Other indicator (per practice): 0=NO 1=YES
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
21.									
22.									
23.									
24.									
25.									
26.									
27.									
28.									
29.									
30.									
Totals	Total(b)=	Total(c)=	Total(d)=	Total(e)=	Total(f)=	Total(g)=	Total(h)=	Total(i)=	Total(i)=

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Adam Pie

Use for January 2011 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Adam Pie

Male DOB: 08/08/1948

0000-88888

Home: 888-888-8888

Ins: Commercial xxxx

Patient Information

Name: Adam Pie

Address: 8888 Crust Dr
Filling, California

Home Phone: 888-888-8888

Office Phone:

Patient ID: 0000-88888

Birth Date: 08/08/1948

Gender: Male

Contact By: Phone

Soc Sec No: 888-88-8888

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Fax:

Status: Active

Marital Status: Married

Race: White

Language: English

MRN: MR-111-1111

Emp. Status: Full-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

HYPERTENSION, BENIGN ESSENTIAL (ICD-401.1) HYPERPLASIA, PROSTATE (ICD-600)

DEPRESSION (ICD-311)

RETINOPATHY, DIABETIC (ICD-362.0)

POLYNEUROPATHY IN DIABETES (ICD-357.2)

Medications

HYTRIN CAP 5MG (TERAZOSIN HCL) 1 po qd

Last Refill: #30 x 0 : Carl Savem (10/27/2010)

PRINIVIL TABS 20 MG (LISINOPRIL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (10/27/2010)

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units

ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (10/27/2010)

PROZAC CAPS 10 MG (FLUOXETINE HCL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (10/27/2010)

Directives

DO NOT RESUSCITATE

Allergies and Adverse Reactions (! = critical)

! CODEINE

Services Due

HEMOCCULT or SIGMOID, BP DIASTOLIC, BP SYSTOLIC, FLU VAX, PNEUMOVAX,
MICROALB URN, FLU VAX, BP DIASTOLIC, BP SYSTOLIC, FUNDUSCOPY, DIAB FOOT CK,
ALBUMIN URIN, TSH,
CHOLESTEROL, HGBA1C, CREATININE.

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Adam Pie

Male DOB: 08/08/1948

0000-88888

Home: 888-888-8888

Ins: Commercial xxxx

12/18/2010 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up to review medications **Chief Complaint:** No complaints

History

Social History: His wife Marzapan died 5 years ago this month and he is more introspective.

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat

Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation

Genitourinary: denies hematuria, frequency, urgency, dysuria, discharge, impotence, incontinence

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies urticaria, hay fever, frequent UTIs; denies HIV high risk behaviors

Vital Signs

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Adam Pie

Male DOB: 08/08/1948

0000-88888

Home: 888-888-8888

Ins: Commercial xxxx

Ht: **70** in. Wt: **190** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **158/ 90**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Adam is voiding better since increasing Hytrin to 5 mg/day. Blood pressure is lower. He is following his diet, by his account. He has not had any hypoglycemic episodes, no night sweats. Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings. He will work harder on diet. Will increase insulin by 2 units. BP and symptoms of prostatism are better.

Home Glucose Monitoring:

AC breakfast 110 to 220

AC breakfast mean 142

AC dinner 100 to 250

AC dinner mean 120

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

PRINIVIL TABS 20 MG 1 qd

HYTRIN CAP 5MG 1 qd

PROZAC CAPS 10 MG 1 qd

Treatment: Will have annual foot exam at next visit.

Orders:

Ophthalmology consult

UA

HGBA1C

Metabolic Panel

Lipid Panel

Hemocult

Education/Counseling (time): 10 minutes

Coordination of Care (time): 10 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

WeServeEveryone Clinic

1111 First Street California
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Adam Pie

Male DOB: 08/08/1948

0000-88888

Home: 888-888-8888

Ins: Commercial xxxx

**12/19/2010 - Lab Report: Metabolic Panel Provider: Carl Savem MD
Location of Care: Millennium Health System**

Tests:

(1) Metabolic Panel (ML-03CHEM)

ALK PHOS	72 U/L
	35-100
BG RANDOM	125 mg/dl
	70-125
BUN	16 mg/dl
	7-25
CALCIUM	9.6 mg/dl
	8.2-10.2
CHLORIDE	101 mmol/l
	96-109
CO2	27 mmol/l
	23-29
CREATININE	0.7 mg/dl
	0.6-1.2
PO4	2.9 mg/dl
	2.5-4.5
POTASSIUM	4.5 mmol/l
	3.5-5.3
SGOT (AST)	31 U/L
	0-40
BILI TOTAL	0.7 mg/dl
	0.0-1.3
URIC ACID	4.8 mg/dl
	3.4-7.0
LDH, TOTAL	136 IU/L
	0-200
SODIUM	135 mmol/l
	135-145

(2) HbA1c Test

HbA1c level 6.0%

(3) Lipid Profile

Cholesterol, Total	210 mg/dl
Triglycerides	236 mg/dl
HDL Cholesterol	36
LDL Cholesterol	127

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Adam Pie

Male DOB: 08/08/1948

0000-88888

Home: 888-888-8888
Ins: Commercial xxxx

FLWSHEET

Date	12/19/2010	12/18/2010
HEIGHT (in)		70
WEIGHT (lb)		190
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		158
BP DIASTOLIC (mm Hg)		90
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)		127
BG RANDOM (mg/dL)	125	
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		0.5 ml g
PNEUMOVAX		0.5 ml g
TD BOOSTER		0.5 ml g
Foot Exam		Complete
Eye Exam		Complete

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Bill Windows

Use for April 2011 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Bill Windows

Male DOB: 09/09/1953 0000-99999

Home: 999-999-9999
Ins: Commercial xxxxx

Patient Information

Name: Bill Windows
Address: 9999 Computer Dr
Operating System, California
Patient ID: 0000-99999
Birth Date: 09/09/1953
Gender: Male
Contact By: Phone
Soc Sec No: 999-99-9999
Resp Prov: Carl Savem
Referred by:
Email:
Home LOC: WeServeEveryone

Home Phone: 999-999-9999
Office Phone:
Fax:
Status: Active
Marital Status: Married
Race: White
Language: English
MRN: MR-111-1111
Emp. Status: Full-time
Sens Chart: No
External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

Medications

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast
Last Refill: #600 u x 0 : Carl Savem MD (09/27/2010)

Directives

DO NOT RESUSCITATE

Allergies and Adverse Reactions (! = critical)

Services Due

BP DIASTOLIC, BP SYSTOLIC, FLU VAX, PNEUMOVAX, MICROALB URN, FLU VAX, BP DIASTOLIC, BP SYSTOLIC, DIAB FOOT CK, ALBUMIN URIN, TSH, CHOLESTEROL, HGBA1C, CREATININE.

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Bill Windows

Male DOB: 09/09/1953 0000-99999

Home: 999-999-9999
Ins: Commercial xxxxx

01/20/11- Office Visit: F/u Diabetes
Provider: Carl Savem MD
Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up for Diabetes
Chief Complaint: No complaints

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no
Polydipsia: no
Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no
Agitation: no
Tremor: no
Palpitations: no
Insomnia: no

Neuroglycopenic Symptoms

Confusion: no
Lethargy: no
Somnolence: no
Amnesia: no
Stupor: no
Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss
Eyes: denies blurring, diplopia, irritation, discharge
Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat
Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema
Respiratory: denies coughing, wheezing, dyspnea, hemoptysis
Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation
Genitourinary: denies hematuria, frequency, urgency, dysuria, discharge, impotence, incontinence
Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain
Skin: denies rashes, itching, lumps, sores, lesions, color change
Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias
Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia
Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance
Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats
Allergic/Immunologic: denies urticaria, hay fever, frequent UTIs; denies HIV high risk behaviors

Vital Signs

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Bill Windows

Home: 999-999-9999

Male DOB: 09/09/1953

0000-99999

Ins: Commercial xxxxx

Ht: **73** in. Wt: **200** lbs. T: **98.0** degF. T site: **oral** P: **74** Rhythm: **regular** R: **15** BP: **128/ 70**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: respiratory effort normal

Cardiovascular: regular rate and rhythm

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): He is following his diet, by his account. He has not had any hypoglycemic episodes, no night sweats. Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, high glucometer readings.

He will work harder on diet. Will increase insulin by 2 units. BP and symptoms are better.

Home Glucose Monitoring:

AC breakfast 110 to 220

AC breakfast mean 142

AC dinner 100 to 250

AC dinner mean 120

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

Treatment: Will have annual foot exam at next visit.

Orders:

UA

HGBA1C

Metabolic Panel

Lipid Panel

Education/Counseling (time): 10 minutes

Coordination of Care (time): 10 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Bill Windows

Male DOB: 09/09/1953 0000-99999

Home: 999-999-9999
Ins: Commercial xxxxx

01/20/2011 - Lab Report: Metabolic Panel Provider: Carl Savem MD
Location of Care: Millennium Health System

Patient: Bill Windows

Note: All result statuses are Final unless otherwise noted.

Tests:

(1) HbA1c Test
HbA1c level 6.0%

(2) Lipid Profile
Cholesterol, Total 210 mg/dl
Triglycerides 236 mg/dl
HDL Cholesterol 36
LDL Cholesterol 127

WeServeEveryone Clinic
1111 First Street California
111-111-1111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Bill Windows

Male DOB: 09/09/1953

0000-99999

Home: 999-999-9999
Ins: Commercial xxxxx

Flowsheet

Enterprise/Medicine/Internal Medicine

Date	01/20/2011	01/19/2011
HEIGHT (in)		70
WEIGHT (lb)		190
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		128
BP DIASTOLIC (mm Hg)		70
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)	127	
BG RANDOM (mg/dL)	125	
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		0.5 ml g
PNEUMOVAX		0.5 ml g
TD BOOSTER		0.5 ml g
Foot Exam		Complete
Eye Exam		Complete

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Billy Gato

Use for October 2010 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Billy Gato

Home: 555-555-5555

Male DOB: 05/05/1955

0000-55555

Ins: Commercial Orange Shield

Patient Information

Name: Billy Gato

Address: 5555 Mountain Blvd
Animal, California

Patient ID: 0000-55555

Birth Date: 05/05/1955

Gender: Male

Contact By: Phone

Soc Sec No: 555-55-5555

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Home Phone: 555-555-5555

Office Phone:

Fax:

Status: Active

Marital Status: Married

Race: Hispanic

Language: English

MRN: MR-111-1111

Emp. Status: Part-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

HYPERTENSION, BENIGN ESSENTIAL (ICD-401.1)

Medications

PRINIVIL TABS 20 MG (LISINOPRIL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (01/27/2010)

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (01/27/2010)

Directives

Allergies and Adverse Reactions (! = critical)

! Benadryl

Services Due

FLU VAX, PNEUMOVAX

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Billy Gato

Male DOB: 05/05/1955

0000-55555

Home: 555-555-5555
Ins: Commercial xxxxx

09/25/2010 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up to review medications **Chief Complaint:** No complaints

History

Social History: Quit smoking 10 years ago

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat

Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation

Genitourinary: denies hematuria, frequency, urgency, dysuria, discharge, impotence, incontinence

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies urticaria, hay fever, frequent UTIs; denies HIV high risk behaviors

Vital Signs

Billy Gato

Home: 555-555-5555

Male DOB: 05/05/1955
0000-55555
Ins: Commercial xxxxx

Ht: **65** in. Wt: **180** lbs. T: **98.0** degF. T site: **oral** P: **70** Rhythm: **regular** R: **16** BP: **134/92**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Blood pressure is lower. He is following his diet, by his account.

He has not had any hypoglycemic episodes, no night sweats. Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings. He will work harder on diet.

Home Glucose Monitoring:

AC breakfast 110 to 220
AC breakfast mean 142
AC dinner 100 to 250
AC dinner mean 120

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast
PRINIVIL TABS 20 MG 1 qd

Treatment: Will have annual foot exam at next visit.

Orders:

Ophthalmology consult
UA
HGBA1C
Metabolic Panel
Lipid Panel

Education/Counseling (time): 5 minutes

Coordination of Care (time): 10 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

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March 24, 2011
Page 2
Chart Summary

Billy Gato
Male DOB: 05/05/1955
0000-55555
Ins: Commercial xxxxx

Home: 555.555.5555

09/19/2010 - Lab Report: Metabolic Panel Provider: Carl Savem MD
Location of Care: Millennium Health System

Tests:

(1) Metabolic Panel (ML-03CHEM)

ALK PHOS	72 U/L	35-100
BG RANDOM	125 mg/dl	70-125
BUN	16 mg/dl	7-25
CALCIUM	9.6 mg/dl	8.2-10.2
CHLORIDE	101 mmol/l	96-109
CO2	27 mmol/l	23-29
CREATININE	0.7 mg/dl	0.6-1.2
PO4	2.9 mg/dl	2.5-4.5
POTASSIUM	4.5 mmol/l	3.5-5.3
SGOT (AST)	31 U/L	0-40
BILI TOTAL	0.7 mg/dl	0.0-1.3
URIC ACID	4.8 mg/dl	3.4-7.0
LDH, TOTAL	136 IU/L	0-200
SODIUM	135 mmol/l	135-145

(2) HbA1c Test
HbA1c level 7.0%

(3) Lipid Profile

Cholesterol, Total	210 mg/dl
Triglycerides	236 mg/dl
HDL Cholesterol	36
LDL Cholesterol	121

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March 24, 2011
Page 2
Chart Summary

Billy Gato

Home: 555-555-5555

Male DOB: 05/05/1955
0000-55555
Ins: Commercial xxxxx

Flowsheet

	Date	09/25/2010
HEIGHT (in)		65
WEIGHT (lb)		180
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		134
BP DIASTOLIC (mm Hg)		92
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)		121
BG RANDOM (mg/dL)		
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		0.5 ml g
PNEUMOVAX		0.5 ml g
TD BOOSTER		0.5 ml g
Foot Exam		Complete
Eye Exam		Complete

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Cherie Amore

Use for October 2010 abstraction

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1111 First Street California
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Chart Summary

Cherie Amore

Home: 333-333-3333

Female DOB: 03/03/1940

0000-33333

Ins: Commercial xxxxx

Patient Information

Name: Cherie Amore

Address: 3333 Wonder Ave
Famous, California

Patient ID: 0000-33333

Birth Date: 03/03/1940

Gender: Female

Contact By: Phone

Soc Sec No: 333-33-3333

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Home Phone: 333-333-3333

Office Phone:

Fax:

Status: Active

Marital Status: Married

Race: White

Language: English

MRN: MR-111-1111

Emp. Status: Full-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

Medications

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast
Last Refill: #600 u x 0 : Carl Savem MD (01/27/2010)

Directives

Allergies and Adverse Reactions (! = critical)

Services Due

FLU VAX

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Chart Summary

Cherie Amore

Home: 333-333-3333

Female DOB: 03/03/1940

0000-33333

Ins: Commercial xxxxx

10/18/2010 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up to review medications **Chief Complaint:** No complaints

History

Social History:

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat

Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies hay fever

Vital Signs

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1111 First Street California
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March 24, 2011
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Chart Summary

Cherie Amore

Home: 333-333-3333
Female DOB: 03/03/1940 0000-33333 Ins: Commercial xxxxx

Ht: **63** in. Wt: **130** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **118/ 60**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: respiratory effort normal

Cardiovascular: regular rate and rhythm,

Problems (including changes):

She is following diet, by her account. Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings.

Home Glucose Monitoring:

AC breakfast 110 to 220

AC breakfast mean 142

AC dinner 100 to 250

AC dinner mean 120

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

Treatment: Will have annual foot exam at next visit.

Orders:

Ophthalmology consult

UA

HGBA1C

Metabolic Panel

Lipid Panel

Hemoccult

Education/Counseling (time): 10 minutes

Coordination of Care (time): 10 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

Cherie Amore

Home: 333-333-3333

Female DOB: 03/03/1940

0000-33333

Ins: Commercial xxxxx

10/19/2010 - Lab Report: Metabolic Panel Provider: Carl Savem MD
Location of Care: Millennium Health System

Tests:

(1) Metabolic Panel (ML-03CHEM)

ALK PHOS	72 U/L
	35-100
BG RANDOM	125 mg/dl
	70-125
BUN	16 mg/dl
	7-25
CALCIUM	9.6 mg/dl
	8.2-10.2
CHLORIDE	101 mmol/l
	96-109
CO2	27 mmol/l
	23-29
CREATININE	0.7 mg/dl
	0.6-1.2
PO4	2.9 mg/dl
	2.5-4.5
POTASSIUM	4.5 mmol/l
	3.5-5.3
SGOT (AST)	31 U/L
	0-40
BILI TOTAL	0.7 mg/dl
	0.0-1.3
URIC ACID	4.8 mg/dl
	3.4-7.0
LDH, TOTAL	136 IU/L
	0-200
SODIUM	135 mmol/l
	135-145

(2) HbA1c Test
HbA1c level 8.0%

(3) Lipid Profile
Cholesterol, Total 210 mg/dl
Triglycerides 236 mg/dl
HDL Cholesterol 36
LDL Cholesterol 125

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03/24/2011 03:24 PM
Page 1
Flowsheet

Cherie Amore

Home: 333-333-3333

103-TEST011

Insurance: BHI (Futura)

Group: BHI1595

Female DOB: 03/03/1940

0000-33333

Ins: Commercial xxxxx

Date	10/18/2010	
HEIGHT (in)		63
WEIGHT (lb)		130
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		118
BP DIASTOLIC (mm Hg)		60
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)		125
BG RANDOM (mg/dL)		
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		
PNEUMOVAX		
TD BOOSTER		0.5 ml g
Foot Exam		
Eye Exam		

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: John Donut

Use for January 2011 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

John Donut

Male DOB: 01/01/1935 0000-11111

Home: 000-000-0000
Ins: Commercial xxxxx

Patient Information

Name: John Donut

Address: 1111 Donut Road
Fast Food, California

Home Phone: 000-000-0000

Office Phone:

Patient ID: 0000-11111

Birth Date: 01/01/1935

Gender: Male

Contact By: Phone

Soc Sec No: 111-11-1111

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Fax:

Status: Active

Marital Status: Widowed

Race: Black

Language: English

MRN: MR-111-1111

Emp. Status: Part-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

HYPERTENSION, BENIGN ESSENTIAL (ICD-401.1)

HYPERPLASIA, PROSTATE (ICD-600)

DEPRESSION (ICD-311)

RETINOPATHY, DIABETIC (ICD-362.0)

POLYNEUROPATHY IN DIABETES (ICD-357.2)

Medications

PRINIVIL TABS 20 MG (LISINOPRIL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (05/27/2010)

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (05/27/2010)

Directives

Allergies and Adverse Reactions (! = critical)

Services Due

HEMOCCULT or SIGMOID, BP DIASTOLIC, BP SYSTOLIC, FLU VAX, PNEUMOVAX, MICROALB
URN

WeServeEveryone Clinic

1111 First Street California
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John Donut

Male DOB: 01/01/1935 0000-11111

Home: 000-000-0000
Ins: Commercial xxxxx

10/31/2010 - Office Visit: F/u Diabetes
Provider: Carl Savem MD
Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up to review medications **Chief Complaint:** No complaints

History

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no
Polydipsia: no
Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no
Agitation: no
Tremor: no
Palpitations: no
Insomnia: no

Neuroglycopenic Symptoms

Confusion: no
Lethargy: no
Somnolence: no
Amnesia: no
Stupor: no
Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss
Eyes: denies blurring, diplopia, irritation, discharge
Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat
Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema
Respiratory: denies coughing, wheezing, dyspnea, hemoptysis
Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation
Genitourinary: denies hematuria, frequency, urgency, dysuria, discharge, impotence, incontinence
Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain
Skin: denies rashes, itching, lumps, sores, lesions, color change
Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias
Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia
Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance
Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats
Allergic/Immunologic: denies urticaria, hay fever, frequent UTIs; denies HIV high risk behaviors

Vital Signs

WeServeEveryone Clinic
1111 First Street California
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March 24, 2011
Page 2
Chart Summary

John Donut

Male DOB: 01/01/1935 0000-111111

Home: 000-000-0000
Ins: Commercial xxxxx

Ht: **74** in. Wt: **190** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **158/90**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Blood pressure is lower. He is following his diet, by his account. He has not had any hypoglycemic episodes, no night sweats. Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings. He will work harder on diet. Will increase insulin by 2 units. BP better.

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

PRINIVIL TABS 20 MG 1 qd

Treatment: Will have annual foot exam at next visit.

Orders:

Ophthalmology consult

UA

HGBA1C

Metabolic Panel

Lipid Panel

Hemoccult

Education/Counseling (time): 10 minutes

Coordination of Care (time): 10 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

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March 24, 2011
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Chart Summary

John Donut
Male DOB: 01/01/1935 0000-11111

Home: 000-000-0000
Ins: Commercial xxxxx

Ins: BHI (Futura) Grp: BHI1595

10/31/2010 - Lab Report: Metabolic Panel Provider: Carl Savem MD
Location of Care: Millennium Health System

Tests:

(1) Metabolic Panel (ML-03CHEM)

ALK PHOS	72 U/L
	35-100
BG RANDOM	125 mg/dl
	70-125
BUN	16 mg/dl
	7-25
CALCIUM	9.6 mg/dl
	8.2-10.2
CHLORIDE	101 mmol/l
	96-109
CO2	27 mmol/l
	23-29
CREATININE	0.7 mg/dl
	0.6-1.2
PO4	2.9 mg/dl
	2.5-4.5
POTASSIUM	4.5 mmol/l
	3.5-5.3
SGOT (AST)	31 U/L
	0-40
BILI TOTAL	0.7 mg/dl
	0.0-1.3
URIC ACID	4.8 mg/dl
	3.4-7.0
LDH, TOTAL	136 IU/L
	0-200
SODIUM	135 mmol/l
	135-145

2) HbA1c Test

HbA1c level 8.0%

(3) Lipid Profile

Cholesterol, Total	210 mg/dl
Triglycerides	236 mg/dl
HDL Cholesterol	36
LDL Cholesterol	102

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March 24, 2011
Page 2
Chart Summary

John Donut

Home: 000-000-0000

Male DOB: 01/01/1935

0000-11111

Ins: Commercial xxxxx

Flowsheet

	Date	10/31/2010
HEIGHT (in)		74
WEIGHT (lb)		190
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		158
BP DIASTOLIC (mm Hg)		90
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)		102
BG RANDOM (mg/dL)		125
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		0.5 ml g
PNEUMOVAX		0.5 ml g
TD BOOSTER		0.5 ml g
Foot Exam		
Eye Exam		

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Monica Latte

Use for April 2011 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Monica Latte

Female DOB: 04/04/1950

0000-44444

Home: 444-44-4444

Ins: Commercial Orange Shield

Patient Information

Name: Monica Latte

Address: 4444 Coffee Ave
Chocolate, California

Patient ID: 0000-44444

Birth Date: 04/04/1950

Gender: Female

Contact By: Phone

Soc Sec No: 444-44-4444

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Home Phone: 444-444-4444

Office Phone:

Fax:

Status: Active

Marital Status: Divorced

Race: Black

Language: English

MRN: MR-111-1111

Emp. Status: Full-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

HYPERTENSION, BENIGN ESSENTIAL (ICD-401.1)

Medications

PRINIVIL TABS 20 MG (LISINOPRIL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (08/27/2010)

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (08/27/2010)

Directives

Allergies and Adverse Reactions (! = critical)

Services Due

FLU VAX, PNEUMOVAX, MICROALB URN

WeServeEveryone Clinic

1111 First Street California
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Monica Latte

Female DOB: 04/04/1950

0000-44444

Home: 444-444-4444
Ins: Commercial xxxxx

3/18/2011 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow

Chief Complaint: No complaints

History

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge

Cardiovascular: denies chest pain

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies urticaria

Vital Signs

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Monica Latte

Female DOB: 04/04/1950

0000-44444

Home: 444-444-4444
Ins: Commercial xxxxx

Ht: **64** in. Wt: **140** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **158/90**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Blood pressure is lower. Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings. Will work harder on diet. Will increase insulin by 2 units.

Home Glucose Monitoring:

AC breakfast 110 to 220

AC breakfast mean 142

AC dinner 100 to 250

AC dinner mean 120

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

PRINIVIL TABS 20 MG 1 qd

Treatment: Will have annual foot exam at next visit.

Orders:

UA

Metabolic Panel

Education/Counseling (time): 5 minutes

Coordination of Care (time): 20 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

WeServeEveryone Clinic
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Monica Latte
Female DOB: 04/04/1950

0000-44444

Home: 444-444-4444
Ins: Commercial xxxxx

03/18/2011 - Lab Report: Metabolic Panel Provider: Carl Savem MD

Tests:

(1) HbA1c Test
HbA1c level 6.0%

(2) Lipid Profile
Cholesterol, Total 210 mg/dl
Triglycerides 236 mg/dl
HDL Cholesterol 36
LDL Cholesterol 107

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Monica Latte

Home: 444-444-4444

Female DOB: 04/04/1950

0000-44444

Ins: Commercial xxxxx

Flowsheet

Enterprise/Medicine/Internal Medicine

	Date	03/18/2011
HEIGHT (in)		64
WEIGHT (lb)		140
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		158
BP DIASTOLIC (mm Hg)		90
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)	107	
BG RANDOM (mg/dL)		125
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		
PNEUMOVAX		
TD BOOSTER		0.5 ml g
Foot Exam		
Eye Exam		Complete

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Steve Apple

Use for April 2011 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Steve Apple

Male DOB: 02/02/1945

0000-22222

Home: 222-222-2222
Ins: Commercial xxxxx

Patient Information

Name: Steve Apple

Address: 2222 Computer Dr
Laptop, California

Patient ID: 0000-22222

Birth Date: 02/02/1945

Gender: Male

Contact By: Phone

Soc Sec No: 222-22-2222

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Home Phone: 222-222-2222

Office Phone:

Fax:

Status: Active

Marital Status: Married

Race: White

Language: English

MRN: MR-111-1111

Emp. Status: Full-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

Medications

PRINIVIL TABS 20 MG (LISINOPRIL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (11/27/2010)

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (11/27/2010)

Directives

Allergies and Adverse Reactions (! = critical)

Services Due

CREATININE

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Steve Apple

Male DOB: 02/02/1945

0000-22222

Home: 222-222-2222
Ins: Commercial xxxxx

2/1/2011 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up to review medications

Chief Complaint: No complaints

History

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise,

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat

Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope, seizures

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies urticaria, hay fever

Vital Signs

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Steve Apple

Male DOB: 02/02/1945

0000-22222

Home: 222-222-2222
Ins: Commercial xxxxx

Ht: **71** in. Wt: **191** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **118/70**

Physical Exam

General Appearance: no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Feet are inspected and there are no callouses, no compromised skin. No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings.

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

PRINIVIL TABS 20 MG 1 qd

Treatment: Will have annual foot exam at next visit.

Orders:

Lipid Panel

Education/Counseling (time): 15minutes

Coordination of Care (time): 5 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

Steve Apple

Male DOB: 02/02/1945

0000-22222

Home: 222.222.2222
Ins: Commercial xxxxx

2/1/2011 - Lab Report: Metabolic Panel Provider: Carl Savem MD

Patient: Steve Apple

Note: All result statuses are Final unless otherwise noted.

Tests:

(1) Metabolic Panel (ML-03CHEM)

ALK PHOS	72 U/L
	35-100
BG RANDOM	125 mg/dl
	70-125
BUN	16 mg/dl
	7-25
CALCIUM	9.6 mg/dl
	8.2-10.2
CHLORIDE	101 mmol/l
	96-109
CO2	27 mmol/l
	23-29
CREATININE	0.7 mg/dl
	0.6-1.2
PO4	2.9 mg/dl
	2.5-4.5
POTASSIUM	4.5 mmol/l
	3.5-5.3
SGOT (AST)	31 U/L
	0-40
BILI TOTAL	0.7 mg/dl
	0.0-1.3
URIC ACID	4.8 mg/dl
	3.4-7.0
LDH, TOTAL	136 IU/L
	0-200
SODIUM	135 mmol/l
	135-145

(2) HbA1c Test

HbA1c level 5.0%

(3) Lipid Profile

Cholesterol, Total	210 mg/dl
Triglycerides	236 mg/dl
HDL Cholesterol	36
LDL Cholesterol	87

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Steve Apple

Home: 222-222-2222

Male DOB: 02/02/1945

0000-22222

Ins: Commercial xxxxx

Flowsheet

	Date	2/1/2011
HEIGHT (in)		71
WEIGHT (lb)		191
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		118
BP DIASTOLIC (mm Hg)		70
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)		87
BG RANDOM (mg/dL)		125
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		0.5 ml g
PNEUMOVAX		0.5 ml g
TD BOOSTER		0.5 ml g
Foot Exam		Complete
Eye Exam		Complete

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Tom Gellato

Use for January 2011 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Tom Gellato

Male DOB: 06/06/1938 0000-66666

Home: 666-666-6666
Ins: Commercial xxxxx

Patient Information

Name: Tom Gellato

Address: 5555 Flavor Ave
Ice Cream, California

Home Phone: 666-666-6666

Office Phone:

Patient ID: 0000-66666

Birth Date: 06/06/1938

Gender: Male

Contact By: Phone

Soc Sec No: 666-666-6666

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Fax:

Status: Active

Marital Status: Divorced

Race: White

Language: English

MRN: MR-111-1111

Emp. Status: Part-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

Medications

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units
ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (04/17/2010)

Directives

DO NOT RESUSCITATE

Allergies and Adverse Reactions (! = critical)

! CODEINE

Services Due

FLU VAX, PNEUMOVAX, MICROALB URN

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Tom Gellato

Male DOB: 06/06/1938

0000-66666

Home: 666-666-6666
Ins: Commercial xxxxx

11/13/2010 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up

Chief Complaint: No complaints

History

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat

Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies urticaria, hay fever, frequent UTIs; denies HIV high risk behaviors

Vital Signs

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

Male DOB: 06/06/1938
0000-66666
Ins: Commercial xxxxx

Tom Gellato

Home: 666-666-6666

Ht: **66** in. Wt: **195** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **131/ 94**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Blood pressure is lower. He is following his diet, by his account. He has not had any hypoglycemic episodes, no night sweats. Feet are inspected and there are no callouses, no compromised skin.

No vision complaints.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings.

Home Glucose Monitoring:

AC breakfast 110 to 220

AC breakfast mean 142

AC dinner 100 to 250

AC dinner mean 120

Plan

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

Treatment: Will have annual foot exam at next visit.

Orders:

Ophthalmology consult

UA

HGBA1C

Metabolic Panel

Lipid Panel

Education/Counseling (time): 10 minutes

Coordination of Care (time): 10 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Tom Gellato

Male DOB: 06/06/1938

0000-66666

Home: 111-111-111
Ins: Commercial xxxxx

Tests:

(1) Metabolic Panel (ML-03CHEM)

ALK PHOS	72 U/L
	35-100
BG RANDOM	125 mg/dl
	70-125
BUN	16 mg/dl
	7-25
CALCIUM	9.6 mg/dl
	8.2-10.2
CHLORIDE	101 mmol/l
	96-109
CO2	27 mmol/l
	23-29
CREATININE	0.7 mg/dl
	0.6-1.2
PO4	2.9 mg/dl
	2.5-4.5
POTASSIUM	4.5 mmol/l
	3.5-5.3
SGOT (AST)	31 U/L
	0-40
BILI TOTAL	0.7 mg/dl
	0.0-1.3
URIC ACID	4.8 mg/dl
	3.4-7.0
LDH, TOTAL	136 IU/L
	0-200
SODIUM	135 mmol/l
	135-145

(2) HbA1c Test

HbA1c level 11.0%

(3) Lipid Profile

Cholesterol, Total	210 mg/dl
Triglycerides	236 mg/dl
HDL Cholesterol	36
LDL Cholesterol	102

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

March 24, 2011
Page 2
Chart Summary

Tom Gellato

Home: 666-666-6666

Male DOB: 06/06/1938

0000-66666

Ins: Commercial xxxxx

Flowsheet

Enterprise/Medicine/Internal Medicine

Date	11/13/2010
HEIGHT (in)	66
WEIGHT (lb)	195
TEMPERATURE (deg F)	98
TEMP SITE	oral
PULSE RATE (/min)	72
PULSE RHYTHM	
RESP RATE (/min)	16
BP SYSTOLIC (mm Hg)	131
BP DIASTOLIC (mm Hg)	94
CHOLESTEROL (mg/dL)	
HDL (mg/dL)	
LDL (mg/dL)	102
BG RANDOM (mg/dL)	125
CXR	
EKG	
PAP SMEAR	
BREAST EXAM	
MAMMOGRAM	
HEMOCCULT	neg
FLU VAX	
PNEUMOVAX	
TD BOOSTER	0.5 ml g
Foot Exam	
Eye Exam	

Module 8: Measuring Performance With Chart Audits

Sample Medical Record: Wendy See

Use for October 2010 abstraction

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Wendy See

Home: 777-777-7777

Female DOB: 07/07/1943

0000-77777

Ins: Commercial Orange Shield

Patient Information

Name: Wendy See

Address: 7777 Candy Lane
Dessert, California

Patient ID: 0000-77777

Birth Date: 07/07/1943

Gender: Female

Contact By: Phone

Soc Sec No: 777-77-7777

Resp Prov: Carl Savem

Referred by:

Email:

Home LOC: WeServeEveryone

Home Phone: 777-777-7777

Office Phone:

Fax:

Status: Active

Marital Status: Single

Race: Asian

Language: English

MRN: MR-111-1111

Emp. Status: Full-time

Sens Chart: No

External ID: MR-111-1111

Problems

DIABETES MELLITUS (ICD-250.)

DEPRESSION (ICD-311)

Medications

HUMULIN INJ 70/30 (INSULIN REG & ISOPHANE (HUMAN)) 20 units ac breakfast

Last Refill: #600 u x 0 : Carl Savem MD (06/17/2010)

PROZAC CAPS 10 MG (FLUOXETINE HCL) 1 po qd

Last Refill: #30 x 2 : Carl Savem MD (06/17/2010)

Directives

Allergies and Adverse Reactions (! = critical)

! Benadryl

Services Due

FLU VAX

WeServeEveryone Clinic

1111 First Street California
111-111-11111 Fax: 111-111-1111

Wendy See

Female DOB: 07/07/1943

0000-77777

Home: 777-777-7777
Ins: Commercial xxxxx

9/22/2010 - Office Visit: F/u Diabetes

Provider: Carl Savem MD

Location of Care: WeServeEveryone Clinic

OFFICE VISIT

History of Present Illness

Reason for visit: Routine follow up

Chief Complaint: No complaints

History

Social History: Her husband died 2 years ago and she is more introspective.

Diabetes Management

Hyperglycemic Symptoms

Polyuria: no

Polydipsia: no

Blurred vision: no

Sympathomimetic Symptoms

Diaphoresis: no

Agitation: no

Tremor: no

Palpitations: no

Insomnia: no

Neuroglycopenic Symptoms

Confusion: no

Lethargy: no

Somnolence: no

Amnesia: no

Stupor: no

Seizures: no

Review of Systems

General: denies fatigue, malaise, fever, weight loss

Eyes: denies blurring, diplopia, irritation, discharge

Ear/Nose/Throat: denies ear pain or discharge, nasal obstruction or discharge, sore throat

Cardiovascular: denies chest pain, palpitations, paroxysmal nocturnal dyspnea, orthopnea, edema

Respiratory: denies coughing, wheezing, dyspnea, hemoptysis

Gastrointestinal: denies abdominal pain, dysphagia, nausea, vomiting, diarrhea, constipation

Musculoskeletal: denies back pain, joint swelling, joint stiffness, joint pain

Skin: denies rashes, itching, lumps, sores, lesions, color change

Neurologic: denies syncope, seizures, transient paralysis, weakness, paresthesias

Psychiatric: denies depression, anxiety, mental disturbance, difficulty sleeping, suicidal ideation, hallucinations, paranoia

Endocrine: denies polyuria, polydipsia, polyphagia, weight change, heat or cold intolerance

Heme/Lymphatic: denies easy or excessive bruising, history of blood transfusions, anemia, bleeding disorders, adenopathy, chills, sweats

Allergic/Immunologic: denies urticaria, hay fever

Wendy See

Home: 777-777-7777

Ht: **60** in. Wt: **120** lbs. T: **98.0** degF. T site: **oral** P: **72** Rhythm: **regular** R: **16** BP: **125/70**

Physical Exam

General Appearance: well developed, well nourished, no acute distress

Eyes: conjunctiva and lids normal, PERRLA, EOMI, fundi WNL

Ears, Nose, Mouth, Throat: TM clear, nares clear, oral exam WNL

Respiratory: clear to auscultation and percussion, respiratory effort normal

Cardiovascular: regular rate and rhythm, S1-S2, no murmur, rub or gallop, no bruits, peripheral pulses normal and symmetric, no cyanosis, clubbing, edema or varicosities

Skin: clear, good turgor, color WNL, no rashes, lesions, or ulcerations

Assessment

Problems (including changes): Blood pressure is lower.

Impression: Sub optimal sugar, control with retinopathy and neuropathy, high glucometer readings. He will work harder on diet. Will increase insulin by 2 units.

Medications:

HUMULIN INJ 70/30 20 u ac breakfast

PROZAC CAPS 10 MG 1 qd

Treatment: Will have annual foot exam at next visit.

Orders:

UA

Education/Counseling (time): 20 minutes

Coordination of Care (time): 5 minutes

Follow-up/Return Visit: 3 months

Disposition: return to clinic

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

Wendy See

Male DOB: 07/07/1943

0000-77777

Home: 777-777-7777
Ins: Commercial xxxxx

Tests:

(1) HbA1c Test
HbA1c level 7.0%

(2) Lipid Profile
Cholesterol, Total 210 mg/dl
Triglycerides 236 mg/dl
HDL Cholesterol 36
LDL Cholesterol 90

WeServeEveryone Clinic
1111 First Street California
111-111-11111 Fax: 111-111-1111

Chart Summary

Wendy See

Home: 777-777-7777

DOB: 07/07/1943

0000-77777

Ins: Commercial xxxxx

Flowsheet

	Date	9/22/2010
HEIGHT (in)		60
WEIGHT (lb)		120
TEMPERATURE (deg F)		98
TEMP SITE		oral
PULSE RATE (/min)		72
PULSE RHYTHM		
RESP RATE (/min)		16
BP SYSTOLIC (mm Hg)		125
BP DIASTOLIC (mm Hg)		70
CHOLESTEROL (mg/dL)		
HDL (mg/dL)		
LDL (mg/dL)		90
BG RANDOM (mg/dL)		125
CXR		
EKG		
PAP SMEAR		
BREAST EXAM		
MAMMOGRAM		
HEMOCCULT		neg
FLU VAX		0.5 ml g
PNEUMOVAX		0.5 ml g
TD BOOSTER		0.5 ml g
Foot Exam		Complete
Eye Exam		Complete

Module 8: Collecting Data With Chart Audits

C. Sample Set of Electronic Pull Instructions for IT Staff

Diabetic Patient Identification IT Instructions

Patient list generator

Step 1: Identify all patients that meet all of the following criteria:

- **Diabetic:** Select patients with any ICD9 = 250.xxx in the billing data.
- Among those, select patients with birth dates after 1/1/1927 and prior to 1/1/1962 [**Age > 50 years and <85 on 1/1/12**]
- Record number of patients seen at least twice in the 2-year period (3/30/2010-3/31/2012) ____
 - Generate list seen at least once in both 12-month periods (3/30/2010-3/30/2011 AND 3/31/2011-3/31/2012).
- Record number of diabetics identified ____
 - Of diabetic patients selected, select those with three hemoglobin A1c values dated from 3/31/2011 to 3/31/2012:
 - Record number of patients identified ____

Step 2: Identify all patients that meet all of the following criteria:

- **Hypertensive:** Select patients with any ICD9 = 401 or 402 or 403 or 404.
- Among those, select patients with birth dates after 1/1/1927 and prior to 1/1/1962 [**Age > 50 years and <85 on 1/1/12**]
- Record number of patients seen at least twice in the 2-year period (3/30/2010-3/31/2012) ____
 - Generate list seen at least once in both 12-month periods (3/30/2010-3/30/2011 AND 3/31/2011-3/31/2012).
- Record number of hypertensives identified ____

Of diabetic patients identified in Step 1 (excluding criteria for hemoglobin A1c values, including those seen twice in both 12-month periods and only those within the range of birth dates listed), how many have any ICD9 = 401 or 402 or 403 or 404?

Module 9: Presenting Data and Benchmarking

A. Performance Metric Calculator for Diabetes

Diabetes HEDIS Measure Outcomes

HEDIS Measure	Audit Result	Practice Goal	National or Local Benchmark
HbA1c screening rate = $[\text{Total(A)}/30 \text{ (total \# of charts audited)}] \times 100 =$			
HbA1c less than 7.0 = $[\text{Total(B)}/\text{Total(A)}] \times 100 =$			
Blood pressure documented = $[\text{Total(C)}/30 \text{ (total \# of charts audited)}] \times 100 =$			
Blood pressure less than 130/80 = $[\text{Total(D)}/\text{Total(C)}] \times 100 =$			
LDL-C screening rate = $[\text{Total(E)}/30 \text{ (total \# of charts audited)}] \times 100 =$			
LDL-C less than 100 mg/dL = $[\text{Total(F)}/\text{Total(E)}] \times 100 =$			
Eye Exams = $[\text{Total(G)}/30 \text{ (total \# of charts audited)}] \times 100 =$			
Foot Exams = $[\text{Total(H)}/30 \text{ (total \# of charts audited)}] \times 100 =$			

Module 9: Presenting Data and Benchmarking

B. WeServeEveryone Clinic Case Example

WeServeEveryone is a federally qualified health center (FQHC) in Long Beach, California. It served 35,000 patients and provided approximately 80,000 patient visits last year. Average cycle time for a visit at all three of its practice sites is 75 minutes. The organization wants to improve patient experience and is interested in reducing patient cycle time as one way to do this.

Approximately 50 percent of the patients who receive care from the clinic are Latino and about 20 percent are monolingual Spanish. About 3 percent of the patients speak Nahuatl. Thirty percent of patients receiving care from the clinic are Asian and Pacific Islanders, and the remaining 20 percent are Caucasian. Forty-five percent of patients are children, 50 percent of patients are adults, and 5 percent are geriatric. Fifty percent of patients are uninsured, and 98 percent are at or below 200 percent of poverty; 70 percent are at or below 100 percent of poverty. Twenty percent of patients are diagnosed with diabetes, 15 percent with hypertension, and 3 percent with asthma.

The chief medical officer (CMO) of WeServeEveryone was serving as a quality improvement (QI) committee of one for the clinic until recently when she attended a session at a conference about QI methods for FQHCs. After returning, she engaged your organization to assist her in forming a QI committee, updating the clinic's QI plan, and identifying some first improvement aims.

Because so many of their patients have diabetes, the CMO and the QI team decided to focus their initial QI work on improving their diabetes care. They are interested in seeing how they are performing on HEDIS* quality indicators for diabetes and comparing themselves to benchmarks from the local community clinic association and those contained in the *National Healthcare Quality Report*.

The clinic recently hired a care coordinator to help with the care of chronic disease patients. It also recently implemented an electronic health record. One of the clinicians recently realized that entries for foot exams had been mapped incorrectly and were not being captured as part of the comprehensive diabetes care record. This is the only data field that appears problematic at this point.

Dr. Sand thinks the clinic is doing “fine” with diabetes care and does not think it is necessary to look at the data. On the other hand, the CMO, Dr. Likes, is very interested in seeing what the data look like not only for diabetes but also for hypertension and asthma.

* HEDIS stands for Healthcare Effectiveness Data and Information Set.

Module 10: Academic Detailing as a Quality Improvement Tool

Introductory Guide to Academic Detailing

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This guide was developed by NaRCAD (National Resource Center for Academic Detailing) with support from a grant from the Agency for Healthcare Research and Quality to the Division of Pharmacoepidemiology and Pharmacoeconomics of Brigham and Women's Hospital.

This guide was authored by Steve Farrell, MBA, Michael Fischer, MD, MS, Jerry Avorn, MD, and Lindsay Ritz, MPH.

Content based on materials developed by iDiS for the Alosa Foundation.

Academic Detailing Visits

Academic detailing is interactive educational outreach to physicians to provide unbiased, non-commercial, evidence-based information about medications and other therapeutic decisions, with the goal of improving patient care. It is usually provided to clinicians one-on-one in their own offices. The approach is based on the effective communication/behavior change/marketing approach that is used so powerfully by pharmaceutical industry sales reps (“detailers”) to increase use of a company’s products. However, academic detailing puts this approach solely in the service of providing practitioners with neutral, rigorous information to optimize their clinical decisionmaking.

Like most human interactions, each academic detailing visit is a unique and potentially unpredictable encounter. This is especially true during the first meeting with a clinician. The flow and course of the discussion depends on the particular skills and personality of the detailer, as well as the clinician’s specialty, practice patterns, attitudes, personality and mood. A series of common steps can help take an encounter successfully from the pleasantries of hellos to the communication and acceptance of specific evidence-based practice recommendations.

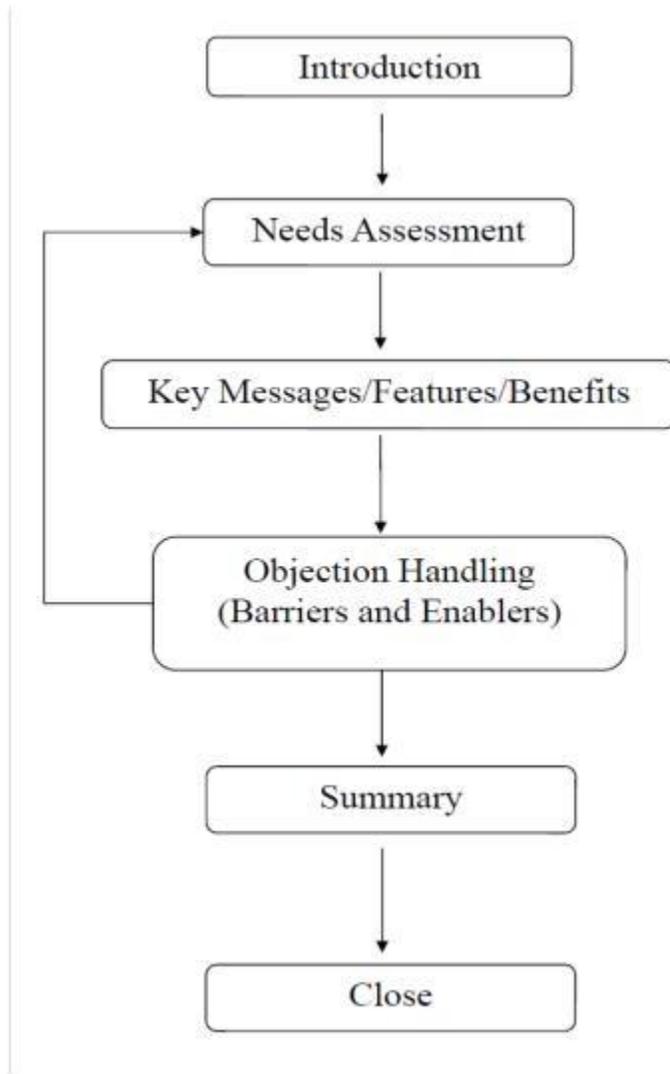
The steps include:

1. The Introduction
2. Needs Assessment
3. Key Messages/Features/Benefits
4. Understanding Barriers and Enablers
5. Identifying and Handling Objections
6. Summary
7. Close

The following pages will cover each of these key steps, and give a sense of how the elements fit together. It is important to understand that a successful academic detail is a conversation, not a checklist. The conversation should flow naturally from the subject matter itself, the focus of the

clinician's medical practice, and the goal of successfully changing attitudes and behaviors in order to improve patient care.

Flow of an Academic Detailing Visit



The Introduction

The introduction is generally brief, but it forms one of the most important parts of an academic detailing visit. It sets the tone of the visit, conveys a sense of purpose, and can lay the foundation for future visits.

If you have previously called on the clinician, your introduction will be a brief reacquainting, since you have laid the groundwork during your previous visits and have already established a relationship. In many cases, you will be calling on someone for the first time and will need to build the relationship from scratch. An important challenge is that while nearly all prescribers know about pharmaceutical company sales reps, most may never have heard of academic detailing—public-service health educators whose job is to communicate unbiased summaries of evidence, rather than to promote sales of particular products. Thus, most initial visits require

explaining the nature of the program and making it clear that it is not just another industry-sponsored promotional program, nor an intervention to cut costs without regard for clinical quality.

The introduction needs to effectively communicate:

Who you are:

Name, title, brief occupational background as relevant.

Where you are from:

The agency or group that you represent, or are funded by, a brief background on your organization if it might be unknown to the clinician.

What the academic detailing service is:

Why the sponsoring group has established the program.

Why you are there and what benefit will you deliver:

What is your purpose for calling on this clinician? How will your visit benefit the clinician?

Example:

“Hi my name is Sally Markinson. I am an academic detailer and a nurse practitioner by training. I’m here as part of a new service supported by the State Department of Health to provide practitioners with summaries of the most current evidence about medications you are currently prescribing [modify as needed for other interventions]. Our goal is to provide you with up-to-date and useful information to help you in managing your patients.”

Check for acceptance: Time is precious for a clinician. You want to make sure that you ask for the time you need in a respectful fashion and that the clinician agrees that it will be worthwhile to talk with you. Emphasize that this is a *service* being offered to the physician, and convey the idea that it can actually be a highly *efficient* use of his/her time to receive a condensed overview of the most recent literature on a given topic.

Example:

“I was hoping to discuss the care of patients with Type 2 diabetes. It should take about 15-20 minutes of your time, in which we can discuss this overview of the most recent clinical literature about the risks and benefits of common approaches to treatment; I believe you’ll find it very informative. Would now be a good time for us to talk?”

“Is this still a good time for us to talk? When would you like me to finish by?”

Note: You need to use your judgment. Does it seem like there is a big backlog of patients? Might another time be better? Is it office policy that visits must be scheduled in advance? Can you get by with just 5 or 10 minutes? If you don’t meet now will you get another chance?

Needs Assessment

To be effective as an academic detailer you need to understand the clinician, his/her practice, beliefs, attitudes, issues, and concerns. This way, you will be able to tailor your visit to address that practitioner's specific situation and needs. This *interactivity* makes it possible for you to adjust your presentation to each of the above elements, rather than delivering a canned one-size-fits-all lecture.

After the introduction, you will need to *bridge* to your intended topic and ask probing questions to assess the perceptions and needs of the clinician.

Note: Needs assessment begins as soon as you walk in the door of the office. How busy is it? What types of patients are in the waiting room? Are patient guides on display? What topics do these guides cover?

Bridge

The bridge is a straightforward way to move smoothly from the introduction to the conversation.

Example:

“As you know, undiagnosed or uncontrolled diabetes is becoming a major public health problem. I want to talk with you about the care of your Type 2 diabetes patients...”

“Many of the doctors I speak with say that the care of their diabetes patients is a real challenge; I would like to talk with you about your care of Type 2 diabetes patients.”

Open-Ended Questions

The goal of the needs assessment is two-fold. You want to understand more about the clinician's practice and attitudes regarding your chosen topic and you want to get thoughtful participation by the doctor in the conversation.

Questions like “Do you see many diabetics?” “How many of your patients are on insulin?” are considered *closed-ended*. While they might be useful in gaining some information, questions that can be answered with yes or no or simple replies do not lead into deeper conversation. These questions might be used to gather specific, relevant information, but you need to rely on more thoughtful questions to really learn about the clinician's practice and to establish an engaging interaction.

To establish a productive conversation, primarily use questions that are *open-ended* and give the clinician an opportunity to say what is on his or her mind. These are typically “how” or “why” questions.

Example:

“I hear from a lot of doctors that compliance is a big challenge. How do you deal with compliance problems among your diabetic patients?”

“Why do you start most of your patients on long-acting insulin?”

“What typically is the trigger that makes you decide to add insulin to the regimen for a particular patient? Why is that?”

Key Messages

In an academic detailing visit your goal is to bring about behavioral change in keeping with the best evidence to improve patient outcomes. You have a limited amount of time to achieve this goal, so it is important to know what the key messages that you need to deliver are. These messages need to be planned and thoroughly understood well in advance of your visit.

Key messages are a limited number of important points that are relevant, compelling, and succinct, and are generally specific practice recommendations. Your clinician must understand and accept these messages before any action can be expected. If at the end of your conversation your clinician will remember only a few points, what would you like them to be? Those few things are your key messages.

Key messages are linked to the materials you share with the clinician. Depending on the topics and the clinician, some messages may be more impactful and better accepted than others. In some discussions you may choose to stress specific messages more than others, as the circumstances dictate. Your ultimate goal is to help the practitioner accept as many of the messages as possible. If multiple visits are planned with the same clinician, you might limit the key messages you focus on during each visit.

Examples:

Good key messages:

- Target HbA1c levels to below 7% for most patients with diabetes.
- Initiate insulin therapy as promptly as possible when oral agents are not effective.
- Use metformin in most cases as the preferred oral antidiabetic starting treatment.

Ineffective key messages:

- HbA1c levels are indirect measures of glucose levels.
- There are over 63 different oral antidiabetic agents to choose from.
- Sulfonylureas work to increase cellular sensitivity to insulin.
- A meta-analysis of all oral agents showed that they were all equally effective.

Note: Just because something is not a key message does not mean it should not be mentioned or shared. It just means that the delivery of that message is not the ultimate goal. Such information may help to support the delivery and the acceptance of your key message, but delivering that information alone does not guarantee that you successfully deliver your key messages.

Features and Benefits

Any product, service or proposed action can be presented as a series of features. *Features* are facts or details that describe a product. A drug may be designed to be taken once a day, or a

guideline can consist of 7 easy-to-follow steps. While it is important to identify the features, the discussion cannot be left there. *Benefits* must also be discussed.

A *benefit* is how a feature meets the needs of the clinician; it has a clear and direct impact. It provides the “what’s in it for me?”

Example:

“A once-a-day drug will be easier for your patients to take and will increase their compliance. That means you don’t have to worry as much about the risk of noncompliance.”

“Following this 7-step guideline will enable you to deliver improved care and save you a lot of time.”

If you are not sure if something is a feature or a benefit, just ask yourself the question, “*So what?*” If you still need further explanation to answer the “*So what?*” question, then you are still describing a feature and haven’t yet gotten to the benefit.

Example:

“X has no known harmful drug interactions.” (*feature*) **So what?**

“...so that when you initiate therapy with X you won’t have to make changes to any of the other medications your patients are already taking.” (*benefit*)

In an academic detailing visit, you should always connect a feature with a benefit. The benefit motivates people to change their opinions or behaviors.

Features and benefits are often linked by words such as “therefore,” “because,” “so that,” “which means,” etc.

Examples:

“Metformin and sulfonylureas work by different mechanisms; therefore, you gain additional HbA1c control by adding a sulfonylurea to a patient inadequately controlled with metformin.”

“The ADA recommends that if the HbA1c level is still above 8% after the use of two oral antidiabetic agents, insulin therapy should be initiated, which means you do not need to worry about the cost, risks, and complexity of adding another oral agent and can get adequate control sooner.”

Barriers and Enablers

When examining your features, benefits and key messages, it is important to plan ahead and anticipate potential challenges you may encounter, as well as potential responses to these challenges. We call these *barriers and enablers*.

Barriers are potential obstacles to acceptance of key messages that clinicians may perceive. These most often appear in the form of an *objection* (see next section). *Enablers* are parts of your key messages; they are benefits and features that might address the concern.

For each key message you should be ready to identify the potential barriers and what enablers might be useful in addressing those barriers.

Examples:

Key Message: “If two oral agents do not control glucose levels, insulin therapy should be added to the regimen.”

Possible Barrier: “My patients don’t want to be on insulin. So I think it is best to add a third oral agent.”

Possible Enabler: “It is common for patients not to want to be on insulin. That is why the ADA recommends waiting until two agents don’t work. But after that, the data shows that the delay can have a negative impact on the patient’s long term health outcomes, and that is why it is so important to start insulin early.”

Key Message: “If two oral agents do not control glucose levels, insulin therapy should be added to the regimen.”

Possible Barrier: “I actually prefer to replace the oral agents with insulin alone. It is cheaper and requires less work for the patient to only take one medicine.”

Possible Enabler: “Data shows that combining oral agents with insulin actually works better. It provides better glucose control and weight control, and can reduce the likelihood and severity of side effects. Since your patient is already familiar with their routine in taking their oral medicine, the addition of insulin will also create the least disruption.”

Handling Objections

As acknowledged in the review of barriers and enablers, clinicians will not always accept the messages you are delivering or agree with the information you share. These *objections* may be direct (“I don’t agree that I should be monitoring my patients that often”) or they may be indirect (“I don’t see that as a problem in my practice”). It is therefore very important to use your communication skills to understand what the true *barrier* is behind the stated objection.

Encountering objections should not be considered a sign of failure or a negative reflection of your skills as an academic detailer. In fact, an objection presented by a physician is a sign of participation and opens an opportunity for addressing an issue he or she sees as an important concern. Objections can also signal the need to better understand your clinician’s situation and to provide more information. Objections could signal: a lack of understanding of the issue, a fear that change means more work, a lack of recognition of the need for change, a misunderstanding of what you communicated, or a genuine disagreement with the content of your message.

Overcome objections by having a positive attitude and avoiding an argument. Use the objection as an opportunity to further your understanding of your clinician and the barriers presented and to move the discussion forward. It may not be necessary to immediately respond to the objection with a counterargument. There are specific steps you should take to effectively manage objections.

Steps for handling objections:

1. **Probe** (ask questions) to clarify your understanding of the objection.
 - This is an opportunity to better understand your clinician's needs and attitudes.
2. **Restate** the objection to signal that you are being attentive to the clinician's concerns, and to confirm that you understand them and have identified the true barrier.
3. **Consider** whether you are prepared to address the objection then and there, or if you need more information and time to do so.
4. **Respond** to the objection, utilizing probing skills and relevant key messages, features/benefits, and enablers.
5. **Gain confirmation** that you addressed the objection successfully.

Objections will generally fall into one of four categories:

1. **Stops:** A disagreement with your key messages and rejection of your call to action.
"I don't think approach A is better than approach B because it is more time consuming."
2. **Stalls:** A deferral of decision on your call to action.
"We have a staff meeting next week and we will discuss the situation and make a decision."
3. **On the fence:** An indication that the clinician is open to your position, but just not completely convinced.
"I understand how your approach could be useful, but I am worried we won't be able to implement it."
4. **Indifference:** A general lack of interest.

Stops

Stops are effectively no's. They can be based on:

- misunderstandings
- skepticism of clinical content
- valid concerns regarding drawbacks

For stops you need to get a better understanding of the concern by asking clarifying questions.

Misunderstandings or skepticism are the easiest to address. They require tactful provision of the correct information. For skepticism you may have to provide the source data or credible third party support for your position.

Valid concerns are sometimes the most challenging to address, since the objections are not over the facts themselves, but rather over the weighting of the facts and the identification of a

drawback. For such concerns you should acknowledge the concern and then reframe the issue so that it fits into the bigger picture, where the benefits outweigh the drawbacks.

Example:

“You are correct, Doctor Smith. Patients are often resistant to initiation of insulin therapy. But most patients with difficult-to-control diabetes will end up on insulin at some point, and data shows that late initiation can have negative long term consequences, including preventable progression of end-organ damage.”

Stalls

A stall is usually a polite “no” or sometimes an avoidance of making a decision. The challenge with a stall is that it keeps you from knowing the clinician’s true thinking. Use the opportunity to discover if a barrier exists behind the stall by asking direct questions.

Example:

Doctor: “Thanks for the information. We have a staff meeting next Friday and we will discuss it then.”

AD: “Great! I will follow up on Monday.” (accepted stall)

vs.

AD: “Based on the information we discussed today, what will your recommendation be at the meeting?” (probed for better understanding)

Depending upon what you discover, you may have to re-engage the stalling physician and handle the true barrier.

On the Fence

For those who are still on the fence, you need to better understand what benefit is missing for the clinician. What would be convincing? Were the benefits that you shared not significant enough? What needs are unfulfilled? Through open-ended probing questions you should be able to uncover what it would take to change their stance.

- Use open-ended probing to understand the nature of the remaining concern or hesitation or to discover what would be convincing.
- Offer information, features, and benefits related to your key messages to address the concern.
- Check to ensure resolution.

“What would convince you to choose another form of insulin for your patients?”

“What do you think is the most compelling clinical data for a product?”

Indifference

In addressing indifference, you need to ask questions to help the clinician see a bigger need.

- Acknowledge the clinician's point of view.
- Request permission to probe.
- Use closed-ended probes to create awareness of a need.
- Confirm the recognition of the need.
- Show how the need can be met.

Example:

“Have you had patients for whom it took unusually long to get their diabetes under control?”

“Did any of them have their cardiovascular or renal status deteriorate during this period?”

“Would it be beneficial to be able to avoid the problems associated with this disease progression?”

(Indifference is one of the times when using closed-ended questions can be very helpful.)

Note: Successful objection handling should ultimately conclude with the acceptance of a relevant key message through its features/benefits. This will enable you to successfully bring the objection to closure.

Summary and Close

The *summary* of an academic detailing visit should not take long. It is not a catalog of everything that was discussed. It is an overview of the key messages that the clinician agreed to and a general sense of where the conversation concluded. It includes checking to make sure that all key concerns have been covered. The role of the summary is to have the clinician acknowledge the key messages “bought into” during the discussion.

During a summary:

- Provide a brief review of the key messages, emphasizing those the clinician seems to have accepted.
- Ask if the clinician has any questions regarding what was covered.
- If further questions exist, use the opportunity to answer them.
- Do not repeat messages that were not well received.

Example:

“Dr. Jones, we discussed the comparative effectiveness data on oral antidiabetic medications and the ADA recommendations based on that data to initiate therapy first with metformin. In addition, we noted the evidence that when oral agents are inadequate to reach target A1c levels, moving to insulin therapy is too often postponed. The recommendations are that if greater control is needed after two oral agents are used, then insulin should be started. Do

those guidelines seem applicable in your practice? Was there anything important you feel I haven't answered or addressed about managing your patients with diabetes?"

After the summary comes the *close*, when you ask the clinician to implement some of the key messages/practice recommendations. From the flow of the conversation with the clinician and the acceptance or rejection of your key messages, you should have a good understanding of what changes he or she may be ready to accept. It is important, however, to get the clinician to own that change. Further, it is helpful to get them to visualize how the changes will be implemented.

Examples:

"I hope this information was helpful to you and that you find these suggestions easy to implement...."

"Will you be able to transition to this new guideline soon?"

"Do you already have patients in mind who might fit those criteria?"

"It's great that you are willing to try these recommendations. Can I check in with you next month to see if you've been successfully implementing the changes and answer any additional questions you may have?"

Note: The close is when you should take the opportunity to see if the clinician would be willing for you to meet with him or her again in the future to share more information.

Module 1&: Assessing Practice Readiness for Change

B. Informal Practice Readiness Assessment

Informal Assessment of Practice Readiness for Improvement

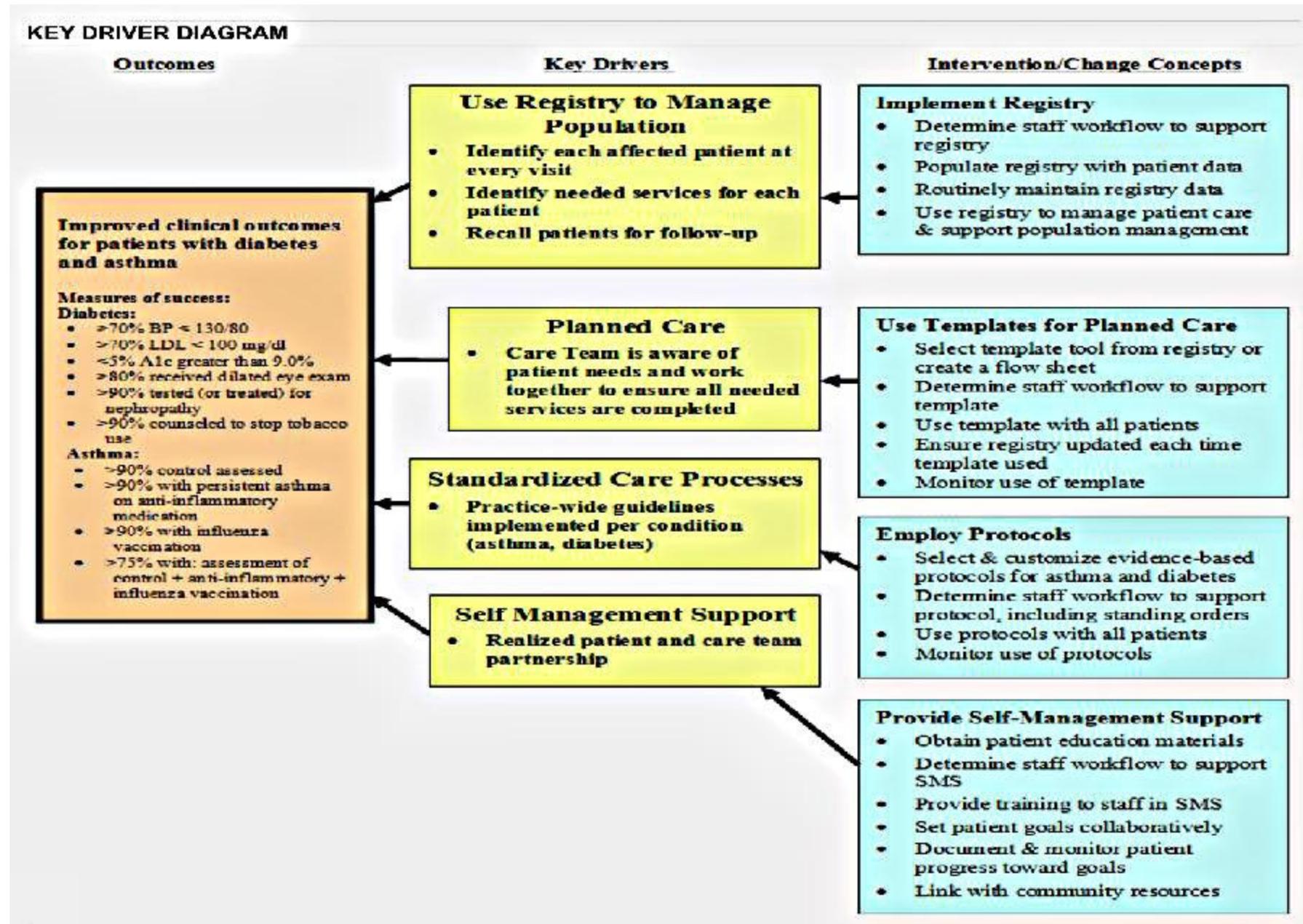
- Practice or organizational leadership is interested in specific or general improvement as evidenced by request for assistance or receptivity to receiving facilitation to support improvement.
- Practice or organizational leadership is willing to participate in ongoing communication with the practice facilitator and the improvement team.
- Practice or organization is willing and able to identify an “improvement” champion who will be the practice facilitator’s point person.
- Leadership is willing to provide protected time for key staff to engage in improvement work.
- Team members are willing to meet regularly as an improvement team, and members follow through with this.
- Team members are willing to gather and report data on practice performance with key metrics.
- Practice has sufficient organizational and financial stability to avoid becoming too distracted or overwhelmed by competing demands or financial concerns.
- Practice is not engaged in other large-scale improvement projects or does not have other demanding competing priorities.

3-Month Followup

- Practice members respond to emails and calls.
- Practice members attend meetings.
- Practice members follow through on most assignments.
- At least one meaningful PDSA cycle is complete.

Module 14: Creating a Quality Improvement (QI) Team and Plan

A. IPIP Key Driver Model



Source: Improving Performance in Practice change package. See www.ipiprogram.org. © 2007 Darren DeWalt. Used with permission.

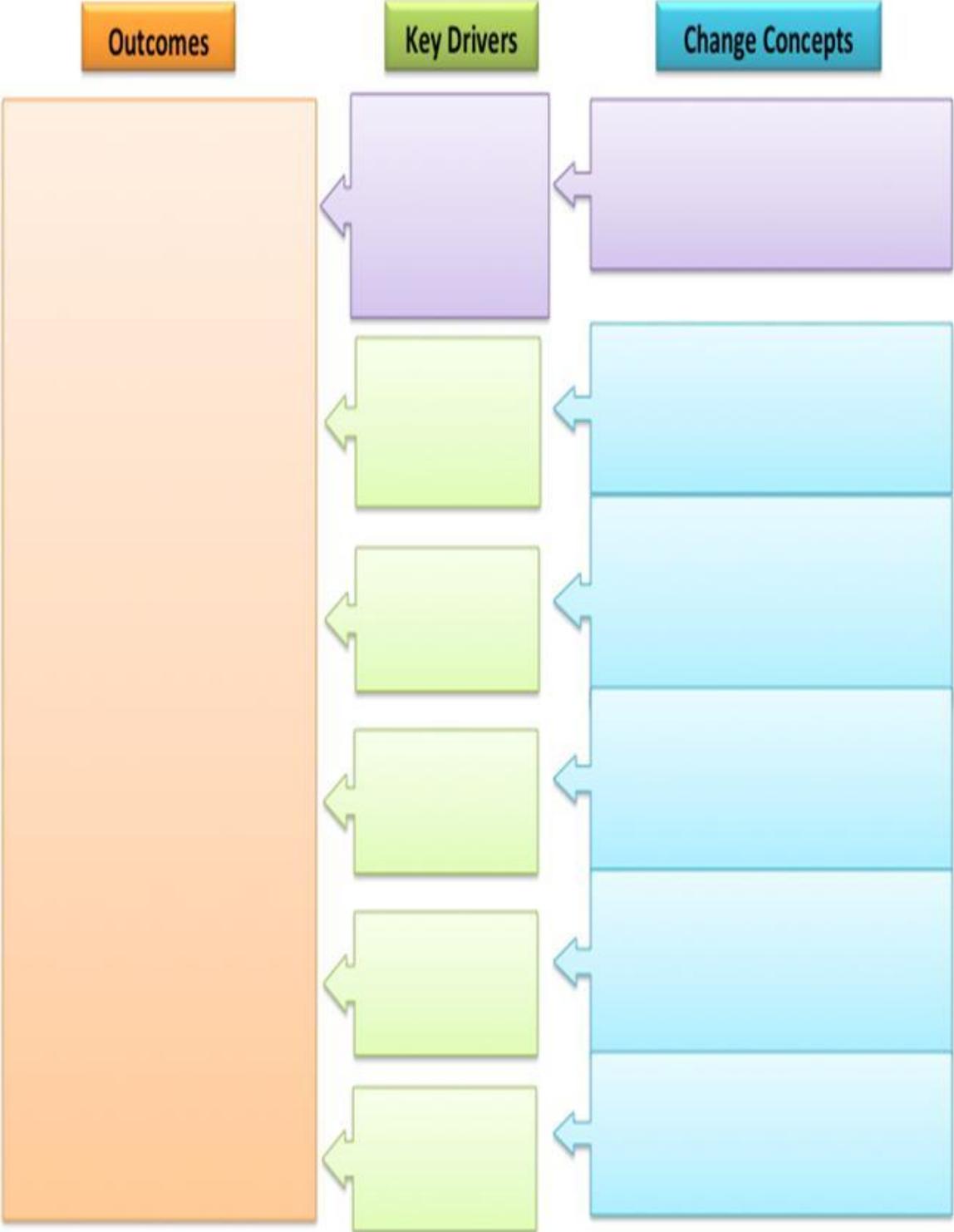
Module 14: Creating a Quality Improvement (QI) Team and Plan

B. Blank Key Driver Template

Practice: _____

Date: _____

Key-Driver Model for Improvement



Module 14: Creating a Quality Improvement (QI) Team and Plan

C. QI Plan Generator

QI Plan Generator

Quality Improvement Plan Generator. Following is a template that you can use to generate a draft QI plan for your practice or organization. It is a starting place. You will want to add to the document over time. The most effective way to use this tool is as a team. Work together with others in your practice who are likely to participate in forming and running your QI program to create a draft plan. You can then use this draft plan as a tool to get your team up and running and as a starting point for a more comprehensive plan you will develop over time.

1. What are your organization's priorities and core values? You can identify these by generating a list of statements that represent your organization's mission and overall values. Example: We strive to put the patient first in all our work.

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QI Plan Generator

***2. Describe your quality vision for your practice or organization and how it aligns with these values. This is the end to which all quality improvement efforts at your practice is working.**

OUR QUALITY VISION IS:

Describe your quality improvement infrastructure. How will the quality improvement program be staffed and structured.

***3. Who will lead your organization's quality improvement efforts. This is usually a Quality Improvement Committee or Team that provides oversight and ongoing monitoring of QI projects and activities. This Committee may report to the Board of Directors or the head of the organization.**

Who will lead your quality efforts and who will they report to? (Example: Our QI Committee will report to the CEO and will be chaired by...)

QI Plan Generator

***4. Who will serve on the Quality Improvement Committee. The most effective committees include representatives from all areas of the practice (physicians, PAs, nurses, health educators, promotores, clerks, and patient representatives)**

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5. What are the duties and responsibilities of the Quality Improvement Committee?

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***6. What meeting structure will you use. Most committees meet monthly to bimonthly to set priorities, review progress and assure progress towards improvement goals.**

How often will you meet? Where will you meet? When will you meet? Will you have a special retreat each year for setting priorities or reviewing progress?

--

QI Plan Generator

***7. What quality improvement approach/es will you use. Most healthcare organization's use the Institute for Healthcare Improvement's Model for Improvement (MFI) and Plan Do Study Act (PDSA) cycles to structure their improvement work.**

***8. What will you use to generate performance data? Who will be responsible for this? And how will they be supported in carrying out this function?**

***9. What are your annual quality goals? These are specific aims and outcomes that your QI committee and organization will work towards and direct resources towards in the coming year. Identify one that you will start working on now. It can help to use SMART when identifying improvement goals. Specific, Measureable, Attainable, Relevant, Time bound**

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10. What goal will you work on first?

QI Plan Generator

***11. QI teams are smaller groups that will work on each of the goals above. Who will be on each project team? Most teams include 48 staff members and patient representatives that are impacted by or involved with the process being improved.**

Team 1

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***12. Performance measurement. What indicators will you use to assess your current performance and progress over time for your first quality goal? Example: All staff will receive the PACT training module on patient-centered care and pass the knowledge assessment with a score of at least 90%.**

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Communicating about your quality activities. What means will you use to communicate with your staff, leadership and patients about the quality activities being undertaken by the committee and improvement teams? Example: You might share meeting minutes, a QI committee report to the Board of Directors, an article in your newsletter or on your website.

***13. Communicating with staff.**

--

QI Plan Generator

***14. Communicating with leadership.**

***15. Communicating with patients.**

Education. How will you provide staff and other with training and learning opportunities in the area of quality and process improvement? What skills and knowledge do you want them to develop?

***16. Plan for educating your Quality Improvement Committee and Project team members**

***17. Plan for educating general staff and clinicians.**

Evaluation. How will you track and evaluate your progress? You will want to evaluate both: 1. The effectiveness of the Quality Improvement Plan (this document) and how well it was implemented, and 2. The quality improvement projects the practice and committee undertook over the year. Some committees and teams use dashboards and datawalls as a way to visually present and display progress. These can be updated on a monthly or quarterly basis and can be a very helpful way to monitor progress over time.

***18. Evaluation of Quality Improvement Plan effectiveness.**

QI Plan Generator

***19. Evaluation of Quality Improvement Plan effectiveness. Example of metrics: Adherence to meeting schedule; number of successful improvement projects; use of systematic improvement process; diversity of improvement team. Metrics for assessing the effectiveness of your Quality Improvement Plan:**

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***20. Evaluation of Quality Improvement Project #1.**

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***21. Evaluation of quality improvement Project #1. Metrics:**

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Module 15: Documenting Your Work with Practices

B. Sample Practice Record

Encounter Notes

Clinic ALLOVERTHEPLACE			
Practice Facilitator (PF)	Lisa Helps A lot	Cell:	Email:
PF Standing Visit (day/time):	Mondays 1-4		
Practice status	Active		
Nominate as Exemplar on:			
Pneumococcal Vaccine delivery	80% of indicated vs. 20% in similar practices in area		
Improvement & Study Projects participating in:			
	Start date	End date	Description
1) Chronic Kidney Disease guideline implementation	9/1/12	10/2/13	Improve quality and outcomes for patients with CKD
2) Implement Care Teams	11/21/12	11/21/12	Implement care teams to support transformation to patient-centered medical home and to improve access and quality
Encounter Notes - Overview (date)			
	Practice Status 0=no progress, 1=some progress, 2=solid progress	Notes	
9/1/12	2	CKD: Met with CKD champion for practice and his team; held project kick-off meeting; academic detailing on CKD guidelines and their use in primary care	
9/8/12	1	CKD: Met with registry manager at request of Dr. Like Data. There are problems pulling eGFR data into the registry. Also, clinicians are coding CKD as	
10/12/12	0	CKD: Dr. CKD not able to meet because practice busy treating patients with flu; registry manager out on vacation; Dr. Like Data not responding to	
10/22/12	0	CKD: No progress with registry because manager out on vacation; Dr. CKD says can meet next week. Started first performance audit on patients with	
11/8/12	2	CKD: Met with Dr. CKD and reviewed performance data. Dr. CKD indicates that information on medications is probably inaccurate due to out of date	
11/18/12	2	CKD: Provided 15 minute training to CKD improvement team on Model for Improvement; provided training also on effective meeting facilitation.	
PRACTICE PROGRESS DASHBOARD			
PROJECT CKD			
Overall Assessment Scales: 0 = No activity; 1 = Planning; 2 = Activity, no change; 3 = Testing; 4 = Implementation; 5 = Spread; 6 = Complete			
A. Create Quality Improvement team/mt and performance monitoring system			
OVERALL SCORE:	CKD	4	NOTES/COMMENTS
A1. Designate Project team leader		6	Dr. CKD is the champion.
A2. Identify performance metrics		6	
A3. Develop performance report generator using EHR and registry data		3	
A4. Map workflow for performance reporting & use		3	
A5. Train Project team on Model for Improvement and PDSA cycles		6	
A6. Review performance report monthly and carry-out PDSAs		0	
B. Use registry to manage target population			
OVERALL SCORE:	CKD	3	NOTES/COMMENTS
B1. Create registry		3	Underway, waiting for registry manager to return from vacation
B2. Populate registry			
B3. Assess & leverage existing population management resources			
B4. Train staff in population management			
B5. Map workflow for population management			
B6. Create reports templates/alerts to allow population management & planned care			
B7. Monitor use of registry to manage patient care and support population management			
C. Use templates			
OVERALL SCORE:	CKD	1	NOTES/COMMENTS
C1. Select template tool from registry/EHR (or create)		1	Dr. CKD plans to meet with EHR manager to create template.
C2. Map workflows to use template			
C3. Use template at every patient visit			
C4. Ensure registry/EHR updated after every patient visit			
C5. Monitor use of templates			
D. Standardize care			
OVERALL SCORE:	CKD	3	NOTES/COMMENTS
D1. Select protocol/guideline for clinical care issue		3	Dr. CKD and team have adopted the CKD guidelines provided by the project. Are discussing modifying lab requirements since some of the labs are expensive and hard to obtain for uninsured patients. Will help schedule virtual conference with Academic Detailer for Dr. CKD and his team to discuss this issue with him.
D2. Modify for use in safety net environment			
D3. Map workflow to implement/use protocol			
D4. Use protocol at every patient visit			
D5. Monitor use of protocol			
E. Self Management support			
OVERALL SCORE:	CKD		NOTES/COMMENTS
E1. Assess existing SMS resources at practice			

Baseline Performance Data

Baseline		
N for performance data abstraction	%	#
30		
CKD pts seen at least 2x from 8-30-10 to 9-1-11 10/24/11		

Demographics		
Male	26.67%	8
Female	73.33%	22
Average age	61.07	
Age range	36-75	-
Latino	76.67%	23
African American	10.00%	3
White (Hispanic & non-Hispanic)	0.00%	0
Not Stated/Other	13.33%	4

Insurance status		
None	3.33%	1
Medicare	20.00%	6
Medicaid	0.00%	0
Other gov't (H/WLA, etc.)	76.67%	23
Private	0.00%	0

CKD patients comorbidities/risk indicators		
DM Dx	3.33%	1
HTN Dx	13.33%	4
DM & HTN	80.00%	24
BP>130/80	53.33%	16
LDL<100		10
Calcium >8.5**		15
PO4 <4.6**		3
Smoker	3.33%	1
Smoking status missing	6.67%	2

CKD on problem list?		
Yes	93.33%	28
No	6.67%	2

Medication		
Aspirin/blood thinner (yes)	80.00%	24
ACE/ARB (yes)	60.00%	18
Vit D 3 (yes)	20.00%	6
NSAIDs (yes)	83.33%	25
Metformin (yes)	30.00%	9

Labs		
45< eGFR <60	43.33%	13
30< eGFR <45	33.33%	10
eGFR <30	20.00%	6
eGFR missing	0.00%	0
In the past 12 months: eGFR	96.67%	29
Referral if eGFR<30	33.33%	10
HbA1c	53.33%	16
Lipid panel	60.00%	18
Serum Ca++	86.67%	26
HGB	50.00%	15
25 hydroxy Vit D	50.00%	15
PTH	23.33%	7
Serum phosphate	20.00%	6
M/C	43.33%	13

Preventive care		
Flu vaccine last 12 months	40.00%	12
Pneumococcal		

Race/Ethnicity

Latino	76.67%
African American	10.00%
White (Hispanic & non-Hispanic)	0.00%
Not Stated/Other	13.33%

Insurance status

None	3.33%
Medicare	20.00%
Medicaid	0.00%
Other gov't (H/WLA, etc.)	76.67%
Private	0.00%

Sex

Male	26.67%
Female	73.33%

CKD on Problem List?

No	7%
Yes	93%

CKD patient eGFRs

45< eGFR <60	43.33%
30< eGFR <45	33.33%
eGFR <30	20.00%

Medications

Aspirin/blood thinner (yes)	80.00%
ACE/ARB (yes)	60.00%
Vit D 3 (yes)	20.00%
NSAIDs (yes)	83.33%
Metformin (yes)	30.00%

Labs within the past 12 months

eGFR	96.67%
Referral if eGFR<30	33.33%
HbA1c	53.33%
Lipid panel	60.00%
Serum Ca++	86.67%
HGB	50.00%
25 hydroxy Vit D	50.00%
PTH	23.33%
Serum phosphate	20.00%
M/C	43.33%

Comorbidities/Risk factors

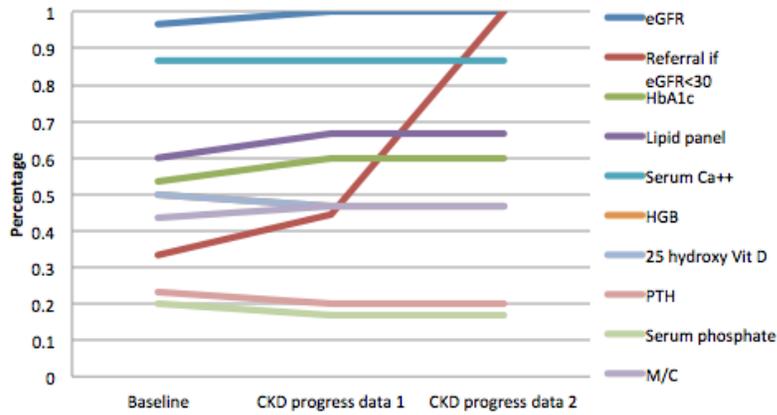
DM Dx	3.33%
HTN Dx	13.33%
DM & HTN	80.00%
BP>130/80	53.33%
LDL<100	0.00%
Calcium >8.5**	0.00%
PO4 <4.6**	0.00%
Smoker	3.33%

Prevention

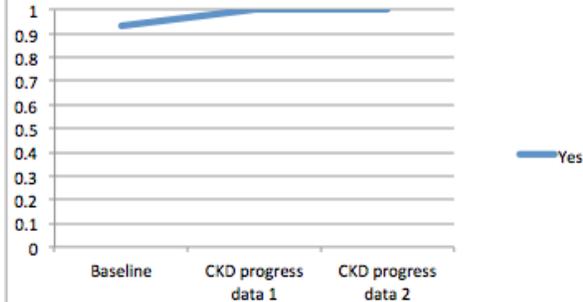
Flu vaccine last 12 months	40.00%
Pneumococcal	0.00%

Performance Data Run Chart

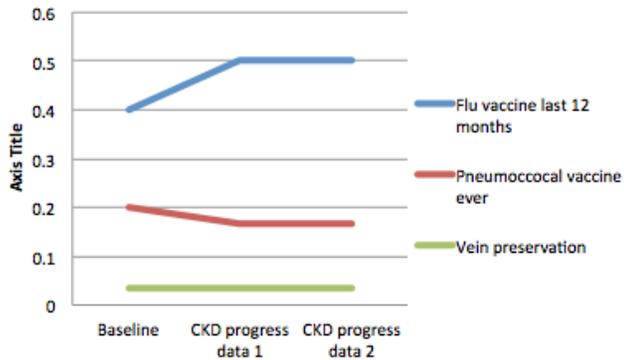
Adherence to recommended labs



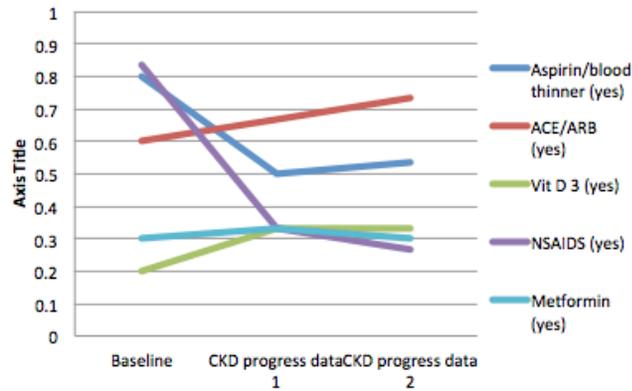
CKD on Problem List?



Prevention



Medications



Plan Do Study Act Report

PLAN DO STUDY ACT (PDSA) REPORT

Aim: (overall goal you wish to achieve):

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan	Person responsible	When to be done	Where to be done
List the tasks needed to set up this test of			

Predict what will happen when the test is	Measures to determine if prediction succeeds		

Do: Describe what actually happened when you ran the test

Study: Describe the measured results and how they compared to the predictions

Act: Describe what modifications will be made to the plan for the next cycle based on what you learned

Workflow mapping: a tool for achieving meaningful use

**Center for Excellence in Primary Care
UCSF Department of Family
and Community Medicine**

Tom Bodenheimer, MD

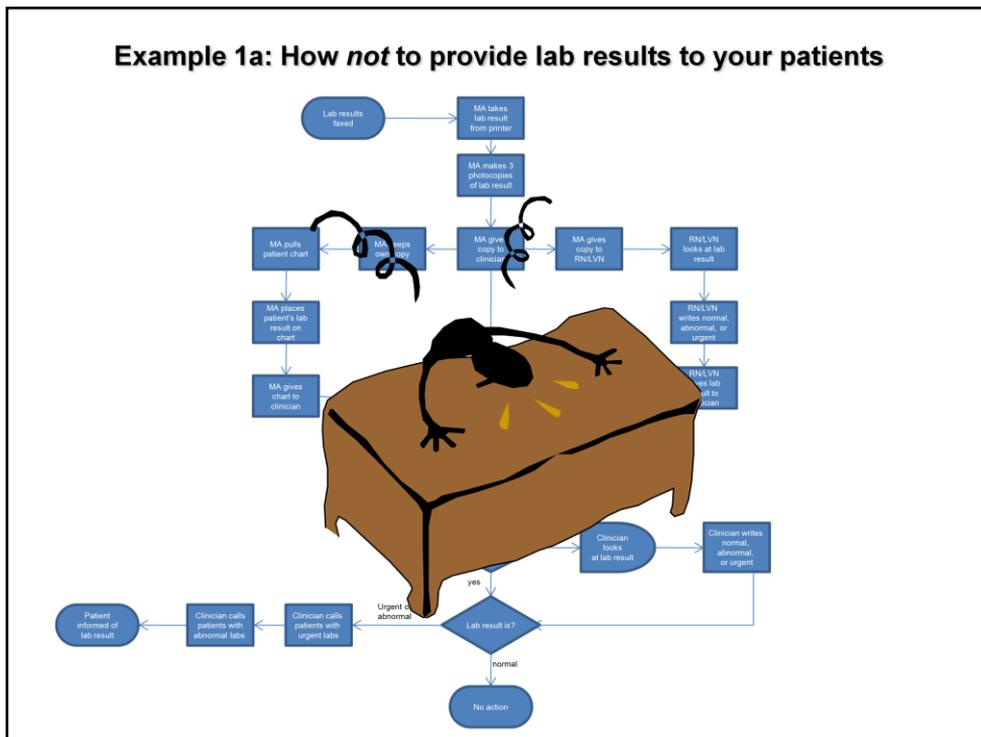
Goals

- **Explain workflow mapping**
- **Discuss why workflow mapping is useful prior to and after EHR implementation**
- **Demonstrate how to create workflow maps**
- **Review some meaningful use workflow examples**

This lesson is designed to be a simple overview of workflow mapping and how it helps practices implement an EHR. There is already a wealth of resources written on the subject of workflow mapping or workflow analysis and how it relates to EHR implementation, but few practices have the luxury of time or an extra staff person to sift through all the documents out there. Some practices choose to hire an outside consultant to help with workflow analysis but with a little guidance, workflow mapping can be performed by the practice themselves.

With that in mind, this presentation will explain what workflow mapping is, discuss the benefits of workflow mapping prior to and after EHR implementation, and demonstrate how to create workflow maps. We will also cover a few example workflows that can help practices achieve specific meaningful requirements for their EHR.

We feel that workflow mapping is essential for a smooth transition from paper to all electronic. Although this presentation primarily focuses on workflow mapping and EHR implementation, workflow mapping has many benefits beyond EHR implementation which we will discuss.

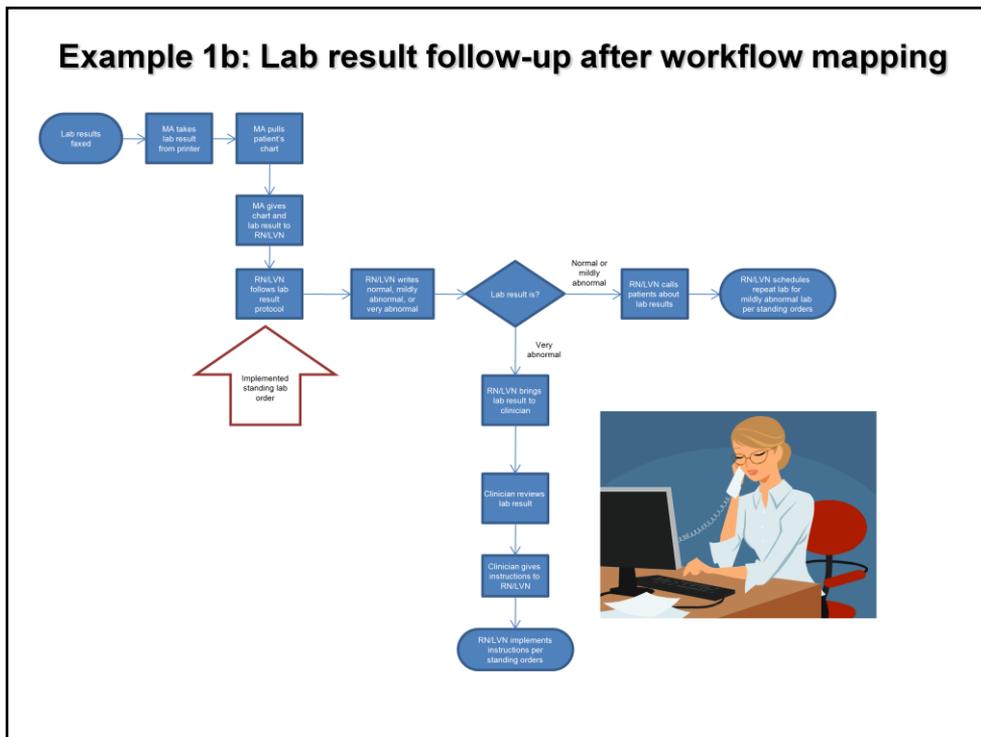


Here is a process that many practices are familiar with: following up with patients and their lab results. Some of you may be grumbling as you think about how frustrating this process can be sometimes. Many practices will probably rank lab results follow-up as the most or one of the most common problems they deal with on a regular basis.

One practice was very aware of the problems around lab result follow-up. They tried different things ways to fix the problems but encountered many failed attempts at improving something. It wasn't until they mapped out the process from beginning to end that they actually figured out the main cause of the problem.

At this practice, when a lab result was faxed to the printer, the MA would receive the fax and make three copies of the result. The MA would then give one copy to the RN/LVN, one copy to the Clinician and keep one for themselves. The MA would then retrieve the patient's chart and puts their copy of the lab result on the chart and places the chart on the Clinician's desk. The RN/LVN looks at their copy of the lab result and writes normal, abnormal, or urgent on it, then places it on the Clinician's desk. The Clinician now has all three copies of a lab result. At some point in the day or night, the Clinician has to sort through all the labs and calls patients with abnormal labs. Patients never learn about lab results that come back normal.

This is a perfect example of how workflow mapping can provide some insight on how things are currently done. After this practice mapped out the process, they realized that the Clinician received three copies of a single lab result whether the result was normal or abnormal.



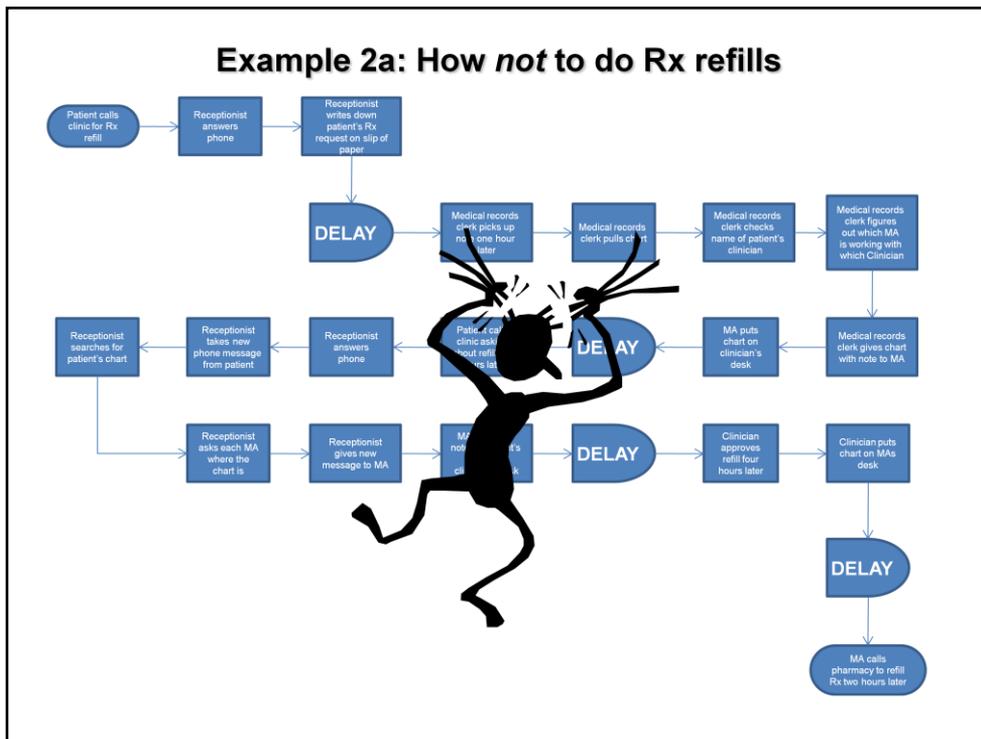
The practice changed the way lab results were handled by writing protocols for the RN to handle lab results.

This is the same practice's new improved process. You can visually see the difference between the new process and the former process, look at how many fewer steps are involved in the new process.

RN/LVNs at the practice now have standing orders for handling lab results. When the results are faxed to the printer, the MA still picks up the lab result, but instead of making 3 copies, the MA hands the lab result to the RN/LVN along with the patient's chart. The RN/LVN contacts patients for normal or mildly abnormal labs. The RN/LVN brings very abnormal results to the Clinician's attention. The Clinician instructs the RN on how to handle the lab result and the RN carries out the orders.

After mapping out the process, this practice was able to see where the waste occurred in the old way of doing things. By eliminating steps that did not add value to the process, like making three copies of the lab result, and implementing protocols for RN/LVNs to follow, the practice was able to inform patients of normal lab results which did not happen previously.

The process on the screen is how the practice envisioned lab result follow up in a paper chart environment. This workflow will change once this practice goes to EHR.



Here is another example of a process with a bad workflow.

Prescription refills are another common headache for practices. This example covers incoming phone calls for prescription refills.

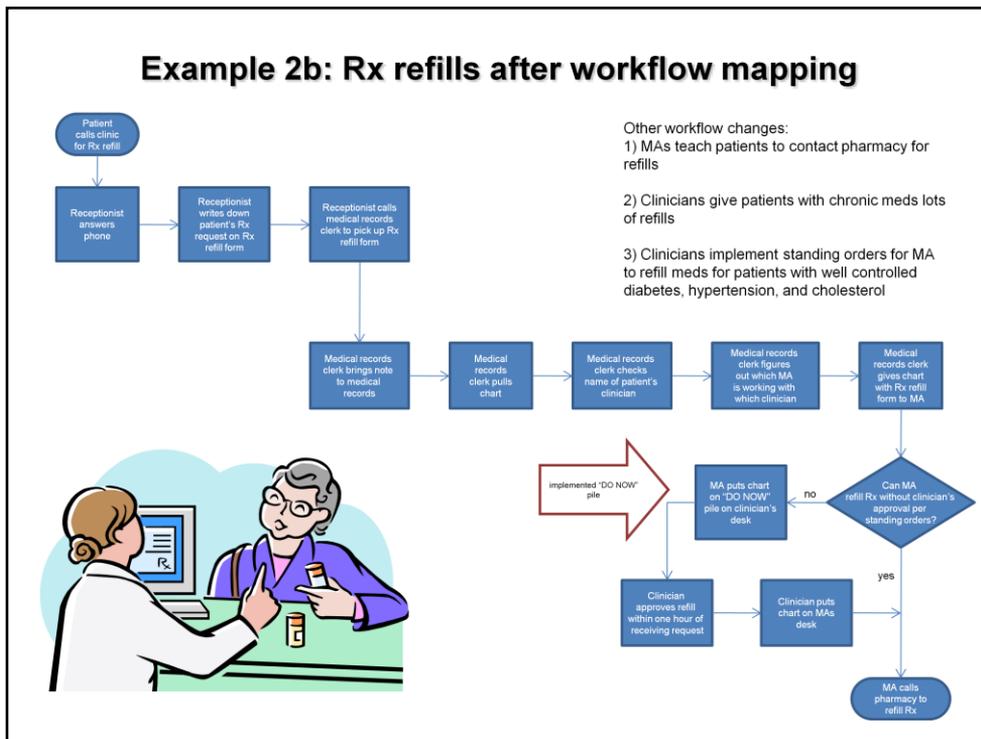
At this practice, the receptionist would take the incoming phone call and write down the patient's request on a tiny slip of paper. The slip of paper would somehow make it's way to medical records and a clerk would pull the patient's chart after an hour has passed.

The medical records clerk then has to figure out which MA is working with which Clinician and gives the chart to the correct MA. The MA puts the chart on a stack on the Clinician's desk. The Clinician is too busy to do anything at the moment.

The same patient calls the clinic 2 hours later asking if the refill has been faxed to the pharmacy. The receptionist takes down another note to put on the chart. The receptionist doesn't know where the chart is so they have to ask all the MAs who has the chart. The receptionist gives the note to the correct MA who puts the new note on the chart sitting on the Clinician's desk 4 hours later, the Clinician approves the refill and puts the chart on the MAs desk. 2 hours later, that MA calls in the prescription to the pharmacy. No one informs the patient that the refill has been approved.

There is a different but similar workflow for faxes coming from the pharmacy for refills.

A lot of time was wasted spent looking for the chart and there was a huge delay in the patient getting a prescription refilled.



After analyzing their workflow map of the prescription refill process, this practice created protocols for Rx refills and 3 major changes to the process

- 1) MAs began teaching patients about contacting the pharmacy directly for refills rather than the practice and teaching patients how to read labels on medication bottles to know how many refills are left and that the Clinician does not need to be contacted if there are refills left
- 2) Clinicians started giving patients with chronic medications plenty of refills
- 3) Clinicians wrote standing orders for MAs to do refills without checking with Clinician for patient's with well-controlled diabetes, hypertension, and cholesterol.

These three changes did not fix the workflow directly, but reduced the number of refills that had to go through the bad workflow by 60%. For the other 40%, the MA placed refill requests on a separate "DO NOW" pile on the Clinician's desk, instead of on the stack already there. It became a practice expectation that the Clinician would authorize refills within an hour of it coming to their desk (to avoid extra phone calls from the pharmacy).

People in the practice are happy and patients are happy because there is less delay in getting refills.

In the previous two examples, we showed you how workflow mapping helps improve process in the paper chart world. Now many of you are probably asking yourselves how does fixing a process pre-EHR help for the post-EHR world? The answer is because the protocols have been done and they are just as relevant for the post-EHR world in reducing Clinician time and reducing patient delay in getting refills, lab results, you name it.

In the post-EHR world, there would have to be rules about which inboxes prescription refills would be routed to so that Clinicians would not get everything in their inboxes. That would require front desk staff to learn the protocols. Having the protocols already in place before EHR implementation can help practices maximize their use of the EHR.

What is a workflow map?

- **A visual representation of a process**
 - A process is a series of actions, steps, or tasks performed in a certain order to achieve a certain result
- **Defines the beginning of a process, the end of a process, and all the steps in-between**
- **Defines who does what in the process**
- **A measurement of what *IS***

Before we go into reasons for doing workflow mapping, the first thing we need to cover is “what is a workflow map.”

If some of you are drawing a blank to what a workflow map is, don't worry, they are not as complicated as they sound. Some of you may already be familiar with workflow mapping but may know it as a different name. Workflow mapping, flowcharting, workflow analysis, clinical review process are a few different terms people use to describe a method of visually representing a process.

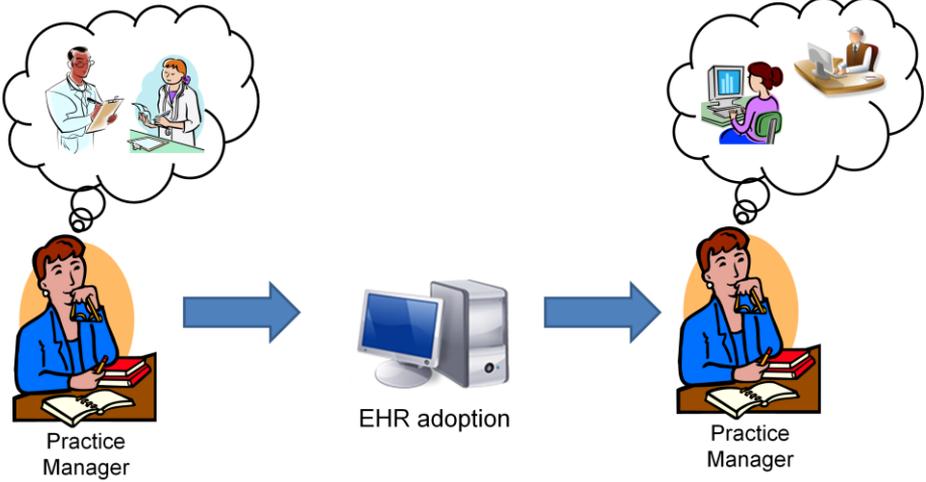
In a process, a series of actions, steps, or tasks are performed in a certain order to achieve a certain result. There are many processes within a practice that are repeated on a daily basis such as registering patients for their appointments, rooming patients, refilling medications, answering telephones, and many more. The steps in each process usually follow some kind of sequential order.

Workflow maps let you graphically see how work is currently done in your practice. Workflow maps use symbols along with words to show how certain things get done in the practice. Workflow maps can also be used to show how certain things move through a practice like patients or a paper form.

Workflow maps give practices an easy and quick way to see the entire process from beginning to end and all the steps that occur in between. Workflow maps also show who performs each task.

When doing workflow mapping, it is okay if your practice workflows are chaotic. If your workflows in the practice are problematic, encounter lots of delays, or have double work, make sure to show it on your workflow map. Workflow maps can only provide insight to why things happen, or in some cases why things don't happen, if you represent your current processes as *IS*.

Workflows before implementing EHR are different from those after



Workflow mapping pre-EHR reveals inefficiencies and waste

- **Workflow mapping helps practices**
 - Identify inefficiencies, waste, and dangers
 - Eliminate wasteful steps
 - Streamline complicated workflows
 - Standardize how work is done
- **Example 1 (lab results): workflow mapping uncovered unnecessary steps that could easily be eliminated, making life easier for physicians and staff**
- **Example 2 (rx refills): workflow mapping showed that big changes were needed to eliminate waste and reduce patient delays**

When people are working through the process trying to get from point A to point B, they usually do not have time to stop in between steps and think “gee, I wonder if this step is really necessary.” It’s when they step back and really look at the process as a whole, they can see the inefficiencies in the process.

Workflow maps can help staff identify inefficiencies, waste, and potential dangers in the process that they may not have realized existed such as delays, bottlenecks, and processes that lead to dead ends.

Workflow maps can help eliminate wasteful steps. Complicated workflows can be streamlined and standardized.

In example 1a lab result follow-up, workflow mapping helped the practice figure out that the MA was making 3 copies of the same lab result. This was determined to be an unnecessary step that could easily be eliminated. The practice also saw that there was a bottle neck in work for the Clinician who eventually ended up with all 3 copies of the lab result.

In the practice’s new lab result process, the MA no longer makes 3 copies of the lab result, instead she gives it to the RN/LVN with the chart. The RN/LVN also now follows protocols instead of always giving the result to the Clinician. Life is much easier for physicians and staff.

In example 2 for Rx refills, workflow mapping showed that there were a lot of delays in the patient getting their meds refilled and a lot of running around finding people and charts. The practice reduced the volume of meds that needed to be refilled by training MAs to educate patients on contacting the pharmacy about refills and eliminated a few delays. The process was able to be streamlined.

Workflow mapping pre-EHR: Tailor EHR to meet practice needs

- **Mapping out processes before EHR implementation helps practices decide how to use the EHR**
- **Workflow mapping demonstrates what protocols and standing orders are needed to redistribute work**
- **Workflow maps help practices work with their EHR vendor so that the vendor understands how each person will use the EHR**
- **Examples 1 and 2: protocols and standing orders written pre-EHR adoption delineate who does what, which facilitates implementation of the EHR**

Some of the reasons for purchasing an EHR are they will improve patient safety and care, make visits better for the patient, increase productivity for Clinicians, and increase revenue for the practice. But if your office processes are not working well currently, an EHR will not be the miracle cure for all your practice's problems. Getting used to the new technology has been shown to disrupt workflows and decrease productivity. All the advertised benefits to having an EHR come after a practice has figured out their workflows.

Optimizing your paper workflows can help prepare for EHR implementation because it helps the practice develop strategies to make the work go better. In examples 1 and 2 protocols and standing orders were written prior to EHR adoption to help the practice figure out who needs to do what in the workflow.

For the lab result workflow, the RN and Clinician were doing duplicative work by having to review the lab result to see if it was abnormal or normal. The protocol helped delineate job descriptions better.

The protocols and standing orders that were developed to improve paper workflows are just as applicable for computer workflows. These protocols and standing orders help practices determine how they are going to actually use the HER.

A practice cannot take full advantage of all the functionalities of the EHR if the clinic is unsure of its workflow goals.

Many EHRs come with features that can be customized in a specific way or features that can be turned off completely. Knowing all the capabilities of your EMR and then aligning it with how you want work to get done can greatly increase productivity.

The better a practice understands how to use the EHR can facilitate communication with the EHR vendor. If the EHR vendor knows that there is a protocol for nurses to handle lab results that are normal or mildly abnormal, the EHR could potentially be built so that lab results that meet the criteria of "normal or abnormal" based on the protocol are sent directly to the nurses inbox rather than to the Clinician who would then have to forward it on to the nurse, this will save time.

Workflow mapping post-EHR: EHR is a huge change

- **Going from paper to EHR changes every single thing in a practice**
- **Roles will change**
 - **What will medical records clerks do?**
 - **Medical assistants will enter vital signs electronically and provide more services in the rooming process**
 - **Clinicians will type progress notes and use templates**
 - **E-prescribing often shifts all refill work to Clinicians' inboxes**
- **Example 2 (rx refill): Post-EHR workflow can be set up so that Clinicians do not handle every refill. This depends on pre-EHR workflow redesign**

When you implement a change in your practice, every aspect of your practice will be touched, and possibly changed in some way.

Switching to an all electronic systems is not as simple as replacing paper with a computer. All workflows which relied on the use of a paper chart will be affected. All processes that included writing something down in the chart, pulling a paper chart, printing out documents to place in the chart will change!

Not only will the tasks involved with the process change, but the people who perform will need to learn how to do things differently. Your practice will need to think about how roles will change.

That full time person your practice hired to pull and file charts will no longer need to do that since all patient records will be obtained from the computer.

Medical assistants will need to enter vital signs electronically and provide more services during the rooming process, things that they may not have learned in their training because it was never a part of their job in the past.

Clinicians will no longer be able to handwrite notes. They will need to learn how to type, and type quickly, or how to use templates to chart.

E-prescribing of medications will also put a lot more refill work on the Clinician's plate as refills are sent to Clinician inboxes.

In example 2 (the prescription refill process)

Performing workflow mapping after EHR implementation is just as beneficial to a practice as it is before.

Workflows post-EHR: shows practices how best to use EHR

- **EHR implementation tends to push work back onto the Clinician. Workflow mapping can prevent this**
- **Workflow mapping helps staff look at entire process and think how their work fits into a larger system**
- **Workflow maps help practices decide which personnel they need post-EHR**
- **Example 1 (lab results): If a practice does not have a RN or LVN, Clinicians need to review all labs. If the practice wants to delegate lab review to another team member, the practice would need a RN or LVN because MAs cannot review labs. Also, the practice will not need a medical records person.**

If my practice was in the midst of adopting an HER, I would not want to waste time figuring out how I could best use the HER. After your practice has adopted the HER, doing workflow mapping can show practices the best ways to use the HER.

EHR implementation tends to push a lot of work back onto the Clinician and workflow mapping can prevent this. In example 1b, the MA receives a physical copy of the lab result that she can pass to the nurse. After the HER arrives, lab results are sent electronically from the lab to the Clinicians inbox

Who's involved with workflow mapping?

- **One designated person**
 - Oversees the team and keeps tasks on track
 - Understands all aspects of the process in detail
 - Drafts the initial workflow map
- **The team**
 - Decides what processes to map
 - Everyone involved in a workflow should be part of the mapping process
 - Discusses accuracy of the workflow map after it's been drafted
 - Perfects the process and maps it out

We feel that workflow mapping is a team activity but some aspects of workflow mapping will need to be distributed to specific members of the team. We broke this slide up into the responsibilities of one designated person and then the responsibilities of the team. We describe the role of the designated person before that of the team because one person begins the workflow mapping process and the team ends the process.

One person will need to take on the role of EHR implementation leader who oversees the team and keeps the team on track. This person will most likely be the medical director of a practice, another member of the practice management team such as a nurse or operations manager, or it may be a physician interested in quality improvement. This person will need to be able to leverage changes in the practice.

The EHR implementation lead will have to choose a team to do workflow mapping. If a team already exists in the practice like a quality improvement committee, that team can be the EHR implementation team. If no team currently exists in the practice, the EHR implementation lead will have to form one. When forming a team, it is very important that it is a multidisciplinary team, meaning that staff who work in different areas of the practice should be included, for example front office, back office, etc.

If your practice is quite small, like a 2-3 doc practice with 1 MA, 1 RN and an operations manager, your team should include the entire staff.

If your practice is a little larger, choose people who are interested in EHR implementation to be on your team.

The team will need to agree on which process to map out first.

One person on the team, not necessarily the team leader, will need to understand the process that has been chosen to be mapped in detail. This same person ideally would also be responsible for drafting the initial workflow map.

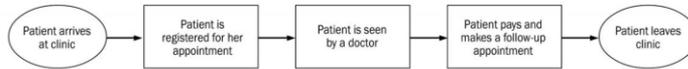
The mapping process may go quicker if the person designated to draft the initial work is very familiar with the process. For example, if your team wanted to map out the patient rooming process, the best person to map out the process would be an MA since they have the most experience with the process.

After the initial workflow is mapped, the team will reconvene to discuss the accuracy of the map, discuss potential changes to improve the process, and then map out the new improved process.

Types of workflow maps

High-Level Flowchart: Shows the major steps of a process. A high-level (also called first-level or top-down) flowchart illustrates a "birds-eye view" of a process.

High-Level Flowchart of Prenatal Care



Detailed Flowchart: Provides a detailed picture of a process by mapping all of the steps and activities that occur in the process. This type of flowchart includes such things as decision points, waiting periods, tasks that frequently must be redone (rework), and feedback loops. This type of flowchart is useful for examining areas of the process in detail and for looking for problems or areas of inefficiency.

Detailed Flowchart of Patient Registration



There are a few different ways to format a workflow diagram, two types of workflow maps that we will discuss here are the high level flowchart and a detailed flowchart.

A high level flow chart also known as a first level or top down flow chart shows the major steps of the process. The major steps being the beginning, end, and a few steps in between. This is the most basic flowchart to create and is good at providing a birds eye view of the process. This type of flowchart is not meant to show all the little details of a chart but to help visualize the entire process with the most important steps. This type of flowchart should be limited to 5 boxes.

Another type of flowchart is the detailed flowchart which provides a detailed picture of the process and maps out all the steps or activities that occur in a process. This type of flowchart includes decision points, delays, tasks that must be redone and feedback loops. This type of flowchart looks at the process in much more detail than the high level one. This type of flowchart is most useful when trying to identify inefficiency and waste in the process.

Whether you choose to use a high level flowchart or a detailed one, be sure to indicate who performs each step of the process.

Know your symbols

	START/END: Indicates the start and end points of a process
	OPERATION: A specific task or activity that is performed
	DECISION POINT: A point in the process where a yes/no question or a decision is required before moving on to the next step
	DIRECTION: Arrows connect steps in the process and direct flow of information
	DELAY: Indicates the workflow goes into a wait
	OFF-PAGE CONNECTOR: Refers to a process located on another page
	ON-PAGE REFERENCE: Refers to a step in the process located on the same page
	UNCLEAR: Use this when a step in the process is unknown or not clear

Note: There are many more symbols than those listed, but these are the most commonly used ones

Before diving in to how to do workflow mapping, we will go over a few basic symbols.

I say a few symbols because there are a lot more symbols that you can use in more complicated workflows. These symbols are the more commonly used ones.

The first four symbols are the most crucial to workflow mapping.

The first symbol is an elongated oval shape that represents the start and end points of a process. All processes have a start and end symbol and some processes may have more than one starting or ending point.

A rectangle is used to represent a step that is performed in the process.

A diamond is used to represent a point in the process where a decision must be made before moving on to the next step. The decision can be a yes/no question or a question with a choice of answers. Not all processes will have a decision point.

An arrow is used to direct the flow of information. Arrows connect different steps in the process.

Elongated semicircles are used to represent delays in the process.

The pentagon shape is used to refer to a separate workflow that is located on another page.

A circle is used to refer back to a step in the process that is located on the same page as your map.

A cloud is used to symbolize a step that you may be unclear about.

Simple steps for workflow mapping

- **Step 1. Pick a process to map out, pick which type of workflow to use, and agree on its purpose**
- **Step 2. Determine the beginning and end points**
- **Step 3. Identify each step in the process**
- **Step 4. Put the steps in order**
- **Step 5. Review and edit the first draft**
- **Step 6. After a day or two, review the flowchart with the team for input**

Speaker:

Here are a few simple steps for workflow mapping.

The first step in the process of workflow mapping is a combination of a few steps. Step 1 is the prework that needs to be done by the team before the one designated person can actually start drawing the map.

Step 1 involves choosing a process to map, picking out which type of workflow you want to use, and agreeing on the purpose of the workflow map. Now, picking out a process to map in itself may be a long drawn out process for some practices which we will not discuss in this presentation. One tip would be to choose a process that is the most time consuming, most labor intensive, or a process that generates the most patient or staff complaints. If no one process immediately comes to mind, a process assessment tool like the "Know your processes-Practice core and supporting processes assessment" evaluation form from Dartmouth's Clinical Microsystems can be used to help identify the first area of focus or just simply poll the members of your team or practice staff.

Then you will need to figure out if you want a high level or a detailed workflow map. A detailed workflow map is more insightful but they can get complicated if the process is complicated. The team will also have to agree on how the workflow map will be used. Are we just trying to figure out what's going on? does your team plan on improving the process after it's been mapped?

Steps 2 -5 is the actual creation of the workflow diagram which is performed by one designated person. These steps can be done with a pencil and paper or you can use post it notes or cut paper into shapes to represent each of the steps. There is also software available specifically for creating workflow diagrams such as Microsoft Visio. If you aren't willing to pay for a program, you can also create flowcharts using microsoft office applications like word or powerpoint, which most practices have invested in. All the workflows in this presentation were made using powerpoint. One piece of advice is to draw out all the shapes and arrange them in order before drawing the connector arrows. This makes it easy to move steps around.

Place the beginning and end steps in their appropriate symbols. Then place each step of the process in the correct symbol, but do not add the arrows yet. Move the symbols around on the page until you decide on an order that is logical. Remember, you are mapping the process as is, not what it would ideally be. Then add the arrow connectors.

Step 2 is to figure out the beginning and end points of the process. Some process may have more than one beginning or end point and that's okay. Think about what signifies the beginning of the process and how do you know when the process is over.

Step 3 is identifying each of the steps in the process and who performs each step. It may be helpful to brainstorm all the steps on a separate piece of paper before placing the steps in symbols.

Step 4 is putting all the steps in order. Some guides will recommend drawing the connecting arrows after all the steps have been drawn because you may want to change the order of steps as you get more and more information about the process.

Step 5 is to review the first draft to make sure it's in a somewhat logical order and make edits if needed.

The last step is for the team to review the initial draft of the workflow map and have the team give input.

One point that cannot be emphasized enough is that the person maps the process AS IS. If the process has multiple dead ends and bottle necks, these things need to be elicited or else it cannot be improved upon. You can't fix something if you do not know what is wrong with it. 16

What to do with your workflow map

- **Look at your workflow map and examine it**
 - Beginning and end points
 - Each activity and wait symbol
 - Decision points
 - Hand-offs (where one person finishes his or her part of the process and another person picks it up)
- **Ask questions about the workflow map**
 - Does that step really need to be there?
- **Map out the improved process**

The workflow map that has just been created has a wealth of useful information if you know what to do with it.

After your workflow map has been approved by the team, look at it closely and ask questions as you examine the map! Examine the beginning and end points, take notice if there is more than one beginning step or more than one end step. Look at the number of activity symbols and number of delays in the process. Pay attention to how many times the process branches due to a decision point in the process. Look at where tasks in the process change hands and how many times these hand offs occur in one process.

Then question the process! For beginning and end steps, can you streamline the process so that there is just one beginning and one end point. Ask yourself and the team is that step really needs to be there. Can the wait in the process be removed somehow? When the process branches out does the process loop back or does it lead to a dead end? Can this person perform this task so the process doesn't have to change hands so many different times.

Does the process even make sense the way it's being done now?

After questioning the process, figure out a way to improve the process. Get rid of a step and see what happens or develop a protocol so work doesn't get piled up for one person.

How *not* to do workflow mapping

- **Map out the processes you *wish* you had**
- **Interview a few key informants to understand the process instead of shadowing everyone involved in the process**
- **Ignore the opinions of those people who know the process best**
- **Put your workflow map on the shelf and don't look at it again**

Workflow mapping can be done in a way that is not useful for your practice.

One of the ways where workflow mapping can go wrong is if you mapped out the process you wish you had, with major emphasis on the word wish. Sometimes when people start mapping out things, they somehow end up with a diagram of how they want the process to look and not how the current workflow actually looks. If the purpose of doing workflow mapping is to figure out what's going wrong in a process, a workflow map of the perfect process will not help because the minor pitfalls that may happen during the process will not be included.

If your team has already mapped out their current process, and discussed some potential solutions to fix the problems then it is okay to map out the ideal process.

Another way that can make workflow mapping a little less useful is if the person drawing the workflow map does not capture the entire process or does not capture the process in detail. This would happen if the person drawing the map only interviewed a few staff members, I'll call them key informants here, associated with the process. In process that change hands multiple times, not everyone will know what the previous person or what the next person in the process will do because naturally we only care about what we have to get done. The best way to figure out the process from start to end is to shadow the people involved and ask questions. Another reason why shadowing people is beneficial to workflow mapping is to figure out all the variations in how the task is performed. Shadowing people may take a little more time; if it's not possible to shadow multiple people, be sure to have input from those who know the process the best.

This leads to another point on how not to do workflow mapping, which is ignoring opinions of those people who know the process the best. For example, no person in the practice will understand all the intricacies of the rooming process better than a medical assistant or a nurse because they do it on a daily basis, or a receptionist will know best how phone calls are handled in the clinic. Getting input from those who know the process the best can assist the workflow process and ensure that it is an accurate representation of what goes on.

The last thing you don't want to do when workflow mapping is to put the workflow that someone just created on the shelf and not look at it again. Having a diagram of the most complicated practice problem is great, but that is only half of workflow mapping, the other part is using it to make things better. Take the workflow map to staff meetings for discussion, post it on a wall with a suggestion box underneath with a sign that reads "how can we fix this".

Achieving meaningful use requires workflow change

- **Meeting meaningful use requires practice staff to perform functions they may not have performed before**
 - **Example: Practices will need to provide patients with an after visit summary**
- **Meeting meaningful use requires efficient high-quality and patient-centered use, not just any use, of the EHR**

Now that we have explained what a workflow map is, discussed the reasons for performing workflow mapping pre and post EHR implementation and demonstrated how you do workflow mapping, we are going to go over example workflows to meet meaningful use requirements.

We included this section in this presentation to give concrete examples of workflows that will be relevant to how practices will deliver care.

Achieving the meaningful use objectives will require a workflow change whether you realize it now or not. We've already discussed how big of a change an EHR is to a practice. The common theme throughout the example workflow slides is that meeting meaningful use will require practice staff to perform functions they may have never performed before, like providing patients with clinical summaries after office visits, or practice staff may perform the same functions, like documenting vital signs or refilling prescriptions, but they will have to learn an entirely new way of doing things.

As we have all probably experienced, change can take a while to get used to. Workflow mapping can however help your practice prepare for the changes beforehand.

If there is no plan on how to use the EHR, the training will be less useful to staff because everything will be theoretical and the training is more of a tutorial on how to use the functions of the EHR, which does have value, but it could have been a session on how a practice can use the EHR to do what it needs to get done; these two things are very different.

Meeting meaningful use requires efficient high quality and patient centered use, not just use, of the EHR. Workflow mapping can help a practice figure out how best to use the EHR, and once a practice has figured out what works in their practice, it will be much easier to achieve meaningful use. Many practices who are not prepared for the change will struggle with EHR implementation.

Meaningful use criteria: Stage 1

Core requirement	Workflow changes needed?	Workflow change ideas
Record patient demographics	Yes	Someone in the practice needs to enter and update demographics
Record vital signs electronically	Yes	Medical assistant adds to rooming tasks: calculating BMI, entering height, weight, BP, growth charts into EHR
Maintain up-to-date problem list	Yes	Clinicians often fail to keep problem lists updated. MA reviews problem list during rooming and reminds clinician to update. MA does not make updates in EHR
Maintain active med list	Yes	MA does med-rec during rooming and makes or pends updates in EHR
Maintain active allergy list	Yes	MA has series of questions about allergies and is responsible for this task
Record smoking status	Yes	MA adds this to rooming task and could do brief counseling (readiness to change, perhaps call state quit line)

The next 3 slides summarize the 15 core requirements and the menu of 10 additional tasks from which practices can choose 5 of. We created a chart summarizing whether a workflow change is needed and some workflow change ideas to get practices thinking about what they can do to meet meaningful use.

You will see that not all of the meaningful use objectives requires a workflow change, some of the meaningful use requirements are functions already built into the HER and will require talking to your vendor.

The first core requirement is to record patient demographics. This does not require a workflow change as most practices already enter this information electronically into their billing systems.

Recording vital signs electronically does require a workflow change. Most Mass already do this, except they write it in the chart.

Maintaining up to date problem lists will require a workflow change. This is something that clinicians often fail to keep updated. A MA would not be able to make changes to the problem list but an MA could review the list with the patient during the rooming process to see if any acute conditions have been resolved and then the MA can remind the clinician to update it in the HER.

Maintaining active medication lists requires a workflow change. MAs could perform this during the rooming process but will need to be trained on how to do medication reconciliation or med rec. it will be a practice policy as to whether or not a MA can make actual changes in the med list. Some EHRs may have a function to pend updates which the clinician can review.

Maintaining active allergy lists and recording smoking status are two other workflow changes that can be performed during the rooming process by an MA. With some training, MAs could even do brief counseling with patients who are current smokers.

Core requirement	Workflow changes needed?	Workflow change ideas
Provide patients with clinical summaries for each office visit	Yes	The clinician does this and trains MA to carry it out
E-prescribing	Yes	For initial prescriptions, clinicians do the e-prescribing, but for some chronic refills, MA could do the refill based on standing orders from clinician
Drug-drug and drug-allergy interaction checks	No	
Exchanging electronic information with other sites of care	Yes	Care coordinator (probably RN) can assist clinicians with this, particularly tracking/follow-up. If there is no RN, a workflow map would show which steps could be performed by a non-clinician staff person
Implement a decision support rule and track compliance with the rule	Yes	Tracking compliance could be done by RN care manager
Systems to protect privacy and security of patient data	No	
Report clinical quality measures to CMS or states	Yes	Someone would be responsible, perhaps practice manager. The responsible person would need training in CQI, numerators and denominators, measures, etc.

A new workflow that many practices may not be used to is providing patients with clinical summaries after office visits. Hospitals would have to provide discharge instructions on request. A clinician could do this or a clinician could create a template for a clinical summary and train the MA on how to print it out.

In this meaningful use summary chart, we combined two objectives surrounding prescriptions into one objective called e-prescribing. Practices must be able to generate and transmit permissible prescriptions electronically and practices will need to start using computer Clinician order entry for medication orders. Clinicians would have to start using the computer to prescribe and refill meds. MAs could eventually take on this role for chronic meds based on standing orders from the clinician.

Practices will be required for drug drug and drug allergy interaction checks, these do not require a workflow change since this functionality is built in to most EHRs.

Exchanging electronic information with other sites of care does require a workflow change. A care coordinator (most like an RN) may be able to assist clinicians with this, particularly tracking and follow-up of information.

Practices will need to implement at least clinical decision support rule and will need to track compliance with this rule. Someone at the practice would need to track compliance with the rule, this role would most like be taken on by an RN care manager.

No workflow changes are required to protect privacy and security of patient data, approved EHRs will already have met this requirement.

The last required objective is to report clinical quality measures to CMS or the state. This does require a workflow change, someone on the larger team would be responsible, perhaps RN care manager. The responsible person would need training in CQI, numerators and denominators, measures, etc.

Menu of additional tasks (choose 5 out of 10)	Workflow changes needed?	Workflow change ideas
Drug formulary check system	No	
Lab results into EHR	No	
Generate lists of patients for QI or outreach (registry)	Yes	The generation of the lists is a technical issues, but panel managers will be needed to work the lists to see which patients need which services, and provide outreach or in-reach. MAs could be the panel managers except their workload is becoming excessive. MAs would do in-reach.
Electronic health education resources	Yes	Health educator is responsible (if available), but clinicians/MAs would also provide the information to patients
Med reconciliation between care settings	Yes	Between settings is complex, but within the primary care practice, MA can do med-rec as part of rooming
Summary of care record for referrals and transitions	Yes	This is mainly a clinician function but it also needs to be tracked and reminders done (MA and/or RN care coordinator)
Immunization data to regional registries	Yes	Someone on team responsible
Surveillance data to public health agencies	Yes	Someone on team responsible
Patient reminders for prevention/chronic care	Yes	This is a panel manager task
Patient access to lab results, problem and med lists, allergies	Yes	Creating a secure patient portal is technical issue, but actually providing the information would be an MA task

Practices will be able to choose 5 additional objectives from a list of 10.

EHRs will need to be able to implement drug formulary checks and lab results will need to be entered into the EHR. Both of these objectives do not require a workflow change.

Practices can choose to generate lists of patients for QI or outreach (registry). The generation of the lists is a technical issues, but panel managers will be needed to work the lists to see which patients need which services, and provide outreach or in-reach. MAs could be the panel managers except their workload is becoming excessive. MAs would do in-reach.

Electronic health education resources

Yes

Health educator is responsible, but clinicians/MAs would also provide the information to patients

Med reconciliation between care settings

Yes

Between settings is complex, but within the primary care practice, MA does med-rec as part of rooming

Summary of care record for referrals and transitions

Yes

This is mainly a clinician function but it also needs to be tracked and reminders done (MA and/or RN care coordinator)

Immunization data to regional registries

Yes

Someone on team responsible

Surveillance data to public health agencies

Yes

Someone on team responsible

Patient reminders for prevention/chronic care

Yes

This is panel manager task

Patient access to lab results, problem and med lists, allergies

Yes

Creating secure patient portal is technical issue, but actually providing the information would be MA task for her teamlet's panel

Suggested workflows for meaningful use

- **The following workflow are examples**
- **How your practice works may be different**
- **Pilot the EHR workflows with one MA or one receptionist and one clinician and a couple of patients to see if they work**

In the next few slides, we will go over some suggested workflows to help practices achieve meaningful use of their HER.

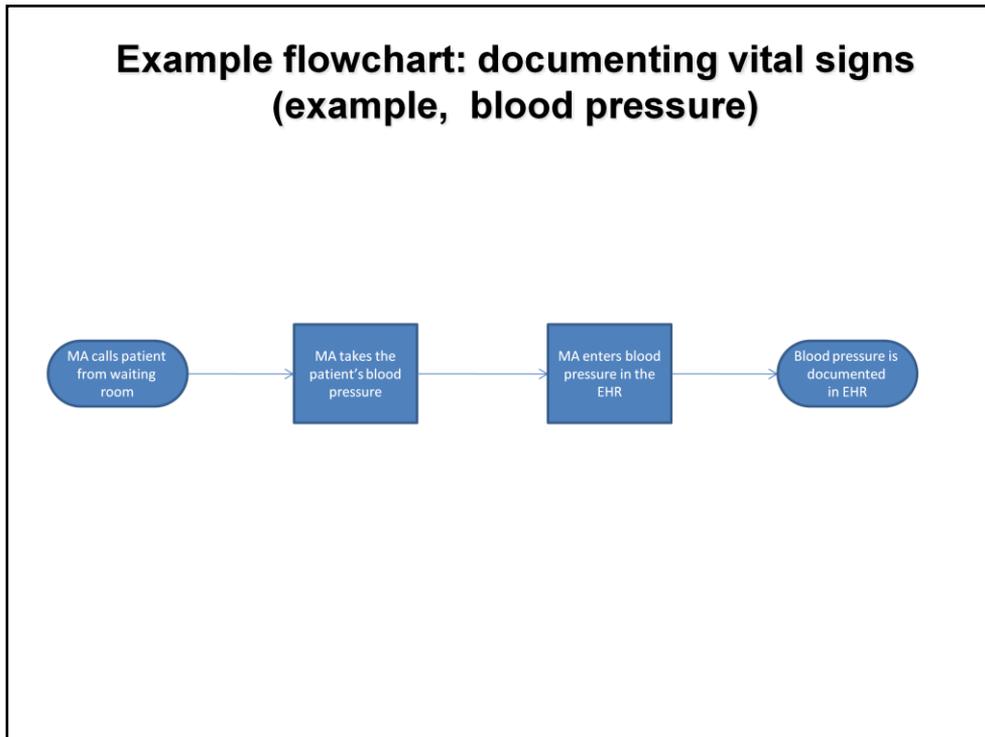
You are all probably aware that in order for practices to achieve meaningful use and get incentive payments that practices will have to meet 15 mandatory use objectives and choose 5 other objectives from a menu set of 10.

We will not be covering all 25 potential workflows. We chose 7 different requirements to go over because the workflows for these 7 requirements are similar regardless of HER choice and regardless of the type of practice you work in. We will cover an 8th workflow on how practices can change a job description. This is not a meaningful use requirement but is may be critical for aiding practices to achieve meaningful use.

i would like to make a disclaimer that the following workflows are just examples, and we are well aware that your practice may work differently. The point of reviewing these workflows is to get practices thinking about what adjustments need to be made in your current workflows; how work will get done once the EHR arrives or how staff may take on different responsibilities.

Your practice can use these workflows or you can modify them to fit your practice's needs. Either way, it is a good idea to pilot the workflows with one MA or with one patient. Test the workflow out on a small scale to see what parts of the process work or don't work. And if things in your proposed workflow map do not work out the way you expected them to, you can easily go back to your workflow map and make the improvements.

Example flowchart: documenting vital signs (example, blood pressure)



This is an example workflow for documenting vital signs.

This workflow begins when the MA, or whoever rooms patients at your practice, call the patient from the waiting room. The MA then takes the patient's vital sign, and then enters the vital signs into the computer, and the process ends. Vital signs refer to height, weight, and blood pressure.

The pre and post HER workflow for documenting vital signs is not very different and it may seem like a really simple workflow for some in the audience. The difference in documenting vital signs pre and post HER is the MA will be entering the vital signs into the computer instead of writing down the vital signs in the chart.

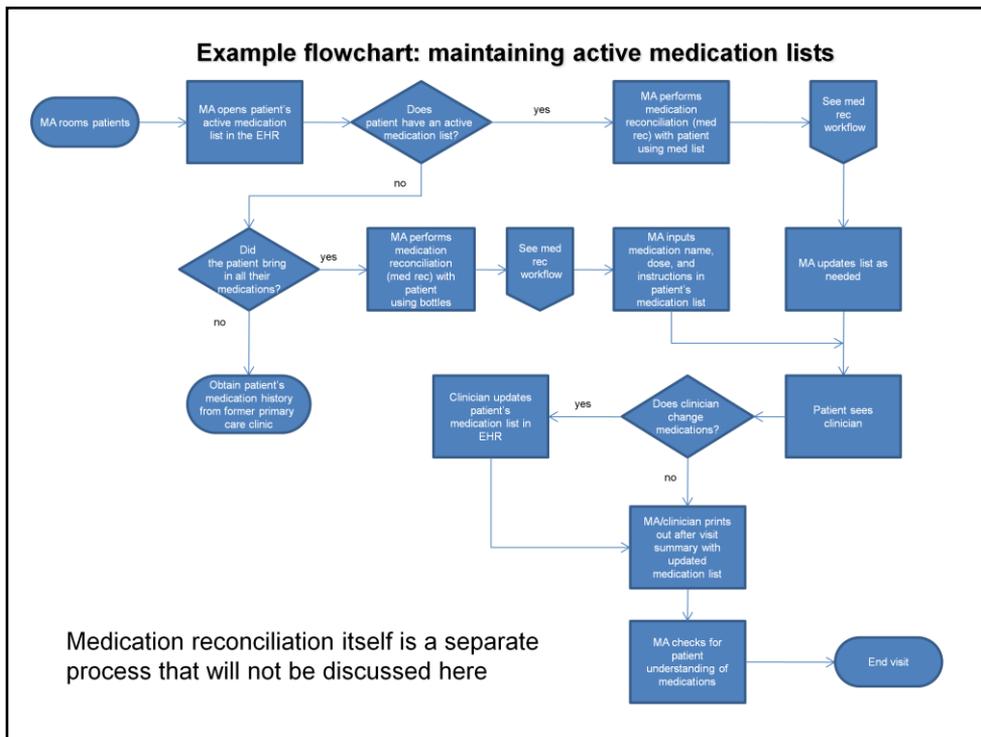
If MAs already enter things into the computer at your practice, this workflow may not seem like a huge shock but for practices who function entirely with paper, this is a big big change.

For this workflow to go smoothly, practices will have to train MAs to be comfortable using computers. If MAs do not get used to entering vital signs into the computer, the rooming process could be delayed.

Before going live, it is good for practices to make sure that MA are prepared for this change before the change actually happens.

A change the rooming process will be necessary to achieve some of the meaningful use requirements. Documenting vital signs in the EHR is just one aspect of the rooming process in a computerized world. Workflows for maintaining medication lists, allergy lists, and documenting smoking status which we will discuss shortly redistribute tasks to the MA or nurse; in this new era of healthcare, they will be doing more things in order to help the larger team.

Since the whole practice is affected by the change and MAs and nurses are taking on a larger role in how things get done in the clinic, it will be crucial for practices to think about what types of training or knowledge different staff members need to perform their jobs adequately after EHR.



Maintaining up to date active medication lists will be required for more than 80% of patients.

This is a workflow that can be performed by a MA or a nurse during the rooming process.

Some practices may be a little apprehensive about having non-clinicians perform this task, but reviewing medications with a patient can be delegated to a non-clinician with proper training.

When a MA rooms a patient, the MA will open up the patient's active medication list. The process branches depending on whether or not there are any medications entered on the list. If there is nothing on the list, the MA will ask if the patient brought in all their medication bottles. If the patient did not bring their medicine, the practice will need to get the medication list at another time from the patient's former health record.

If the patient did bring in all their medications, the MA can perform a medication reconciliation (med rec). Performing med rec is another workflow which we do not have time to cover now so we used the off page reference symbol to indicate that the med rec workflow is located on another page.

After med rec is performed, the MA inputs the medication name dose and how the patient takes the med into the active med list.

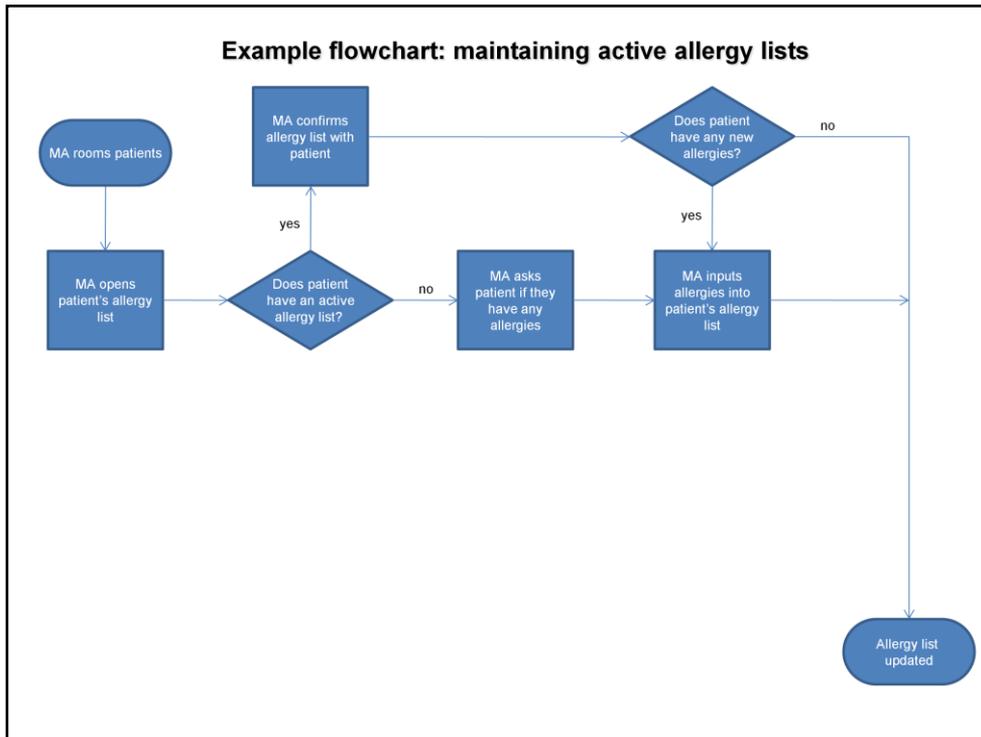
If a patient does have an active medication list, the MA will perform a med rec using the medication list and updates the list as needed.

This workflow does bring up a practice policy question. If medication changes are made during the visit, who enters the changes in the EHR, should it be the clinician or can the MA do it? This question will need to be discussed among your practice.

In our example workflow, the clinician updates the EHR after making a change to the medications. If your practice would rather delegate this responsibility to an MA or nurse, the Clinician would have to approve a medication change and then somehow let the MA or nurse know that a change has been made.

Ideally after the visit, the MA or Clinician would print out the medication list with all the changes, hand it to the patient and then someone of the health care team would close the loop with the patient and check if they know how to take their medications.

Again, this workflow will require a level of comfort with computers, and possibly typing out medication names, dosages, and instructions. Some of these things can be turned into structured data in EHR, which means MAs and Clinicians can select the drug name, dose, etc from a drop list of options, but sometimes these lists can get unwieldy. Your practice will need to decide if everything will be typed or if you want to use structured data.



Another workflow that can happen during the rooming process is maintaining active allergy lists.

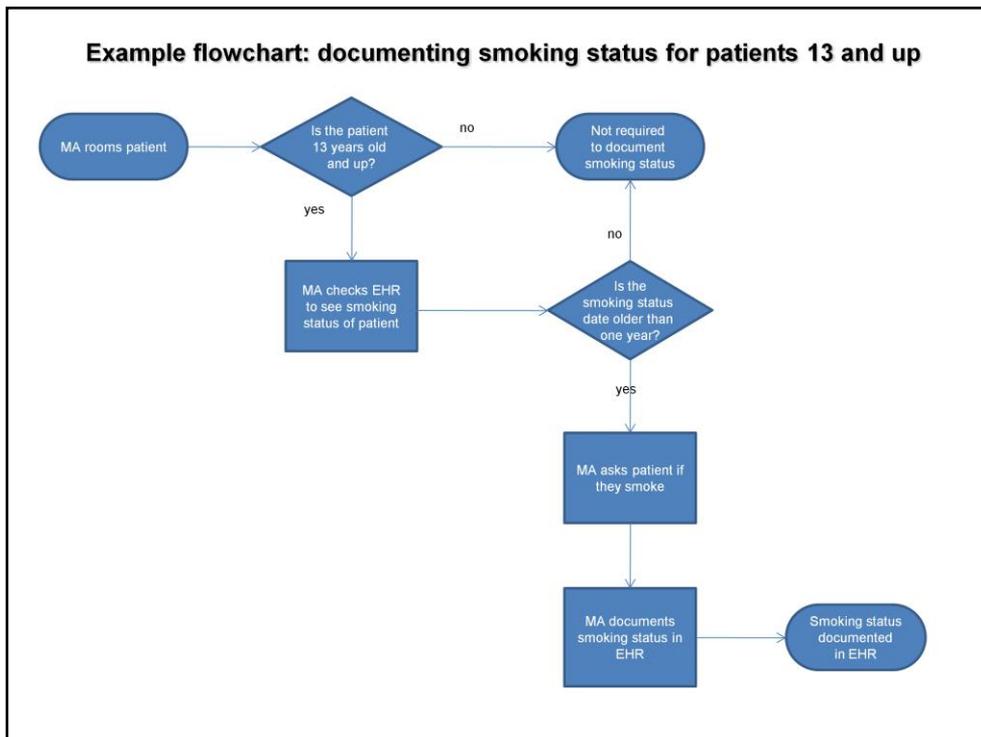
After the patient is roomed, the MA will need to open up the patient's active allergy list. If there is not a list present, the MA will need to ask the patient if they have any allergies to anything. The MA will then input the allergies into the patient's allergy list.

If the patient does have an allergy list, the MA can review the listed allergies with the patient and then ask if the patient may have developed any new allergies since the last visit. If the patient has new allergies, the MA will update it in the computer, if not, the allergy list is up to date.

Maintaining the allergy list can be done at every visit.

This workflow is not that different using a paper allergy list or a computerized allergy list, it's just entered in a different medium. Again this process will require training non clinician staff to be comfortable entering data into the computer. Similar to entering in medications in the "maintain active medication list" workflow, practices will need to partially use structured data for allergies, so staff can choose an allergy amongst of things.

If your practice has a policy to ask about allergies at every visit, that same policy should apply when you have an EHR.



To meet meaningful use, smoking status will need to be captured as structured data for 50% of all patients 13 years or older at least once during the reporting period.

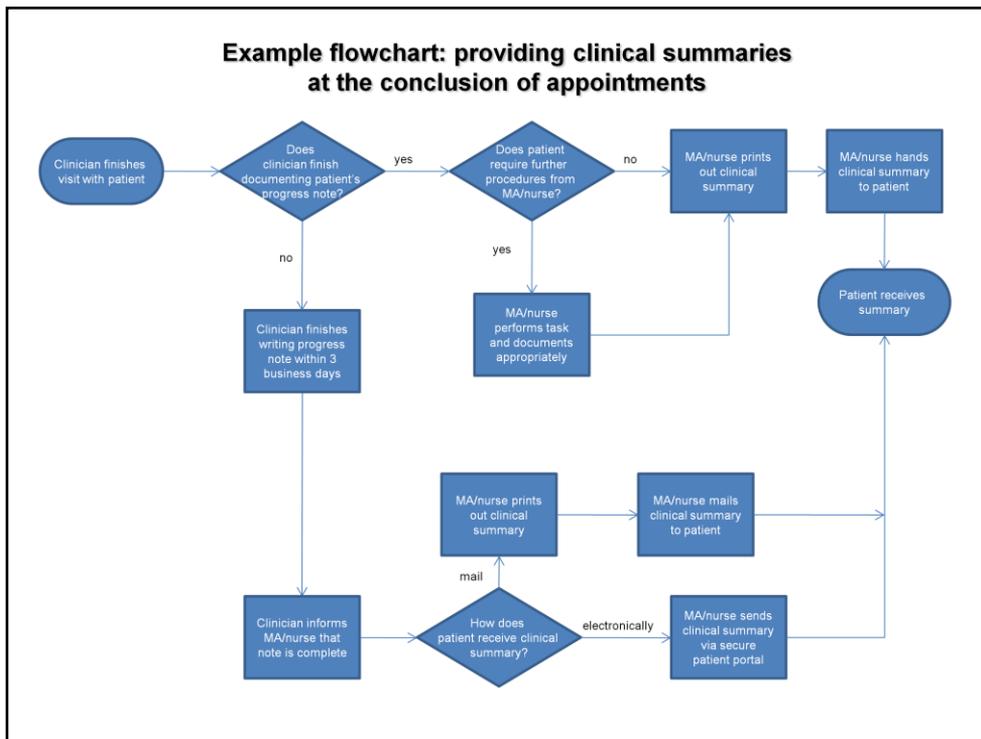
This workflow would also take place during the rooming process by an MA or nurse.

Once the patient is roomed, the MA needs to first figure out if the patient should be screened. Meaningful use only requires patients who are 13 years and older to have this question asked. If the patient is not 13 or up, smoking status does not need to be documented.

If the patient is 13 year or older, the MA should check when the last time it was asked. The reporting period is about one year, so patients 13 and up need to be asked this question at least once a year. If the patient's smoking status has been recorded, nothing has to be done. But if the smoking status has not been recorded, the MA will ask the patient if they smoke and then they will document it in the EHR.

Having this workflow in mind, practices can think about what functions they want for their EHR. This is an area where practices can ask their EHR vendor if it is possible for the smoking question not to appear until patient's turn 13 or have an alert when the smoking status was asked 10 months ago or other features that let the MA know that it needs to be asked and documented.

This workflow is purely about documenting the smoking status in the computer. A separate smoking cessation workflow will need to be created to deal with patients who answer "yes" to the question if they smoke.



A workflow that may be entirely new for some practices is giving patients a clinical summary after the visit.

Practices will need to provide a clinical summary, or an after visit summary, to the patient within 3 business days after the visit concludes for more than 50% of all office visits.

This workflow begins after the Clinician has finished seeing a patient. This workflow is dependent on the Clinician finishing their progress note in a timely manner. If the Clinician finishes the progress note by the end of the visit or a few minutes after the visit, the clinical summary can be given to the patient before they walk out of the building.

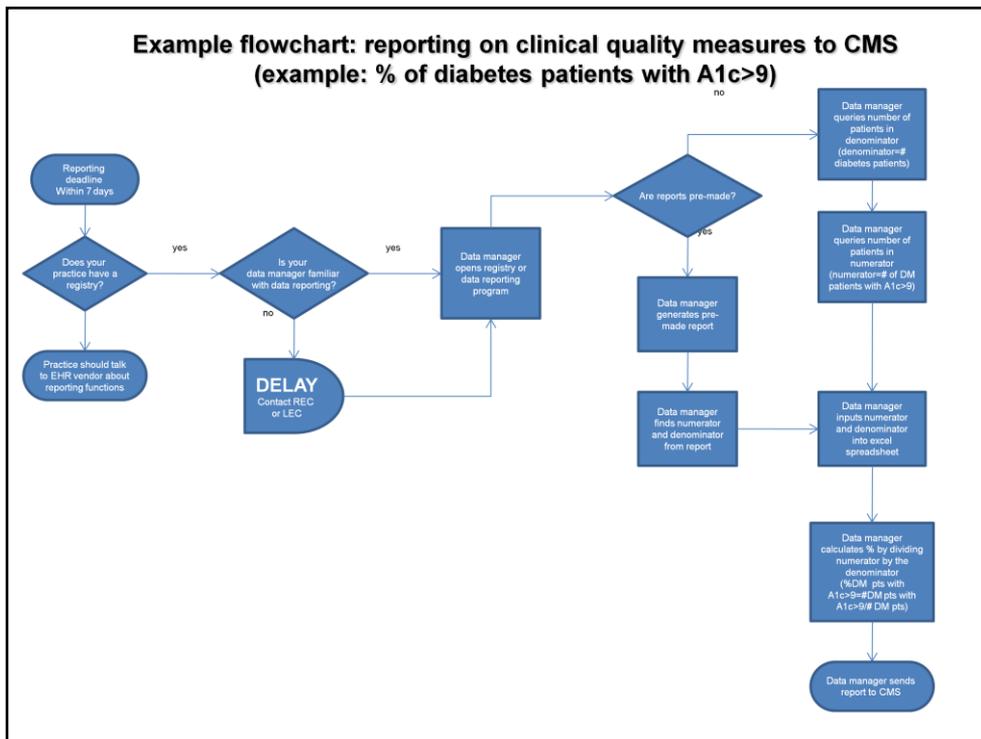
In our example, if the Clinician does finish charting, the next step is to see if the patient requires some type of procedure from a MA or a nurse like an injection. If the patient does not need anything further, the MA or nurse can just print the clinical summary and hand it to the patient and the patient leaves with their summary in hand. If a procedure is needed, the MA or nurse performs the procedure and documents accordingly and then prints and hands the clinical summary to the patient.

However, if the Clinician does not finish the note before the patient walks out of the building, the Clinician will need to finish the note within 3 business days. The Clinician would also have to notify the MA or nurse that a note is complete. After the MA has been notified, the MA needs to make a decision as to how the note will be delivered to the patient.

For most practices, mailing the print out of the patient visit summary will be the easiest way for the patient to receive the summary. If your practice has the resources to purchase a patient portal, the clinical summary could be delivered to a patient's portal in a secure manner.

In this example, we have the MA printing out the note and giving it to the patient if the Clinician finishes the note before the patient leaves. Some practices may just have the Clinician print the note out and hand it to the patient to prevent handing off the task to another person.

Some other things to consider about this workflow is having someone explain the plan in the clinical summary to the patient. Although the meaningful use objective is to make sure that a patient receives a summary within 3 business days, having someone, either the Clinician or an MA actually explain the note with the patient can improve the quality of care the patient receives.



Another meaningful use objective that practices will need to meet is they will need to use their HER to report clinical quality measures to CMS or states.

In the paper chart world, performance on clinical quality measures was accomplished through chart audit. Some practices may remember CMS representatives coming to your office, and then someone would pull x amount of charts for the representatives to review and these people would lock themselves in a room somewhere combing through all of the charts.

Needless to say, gathering data on clinical quality was very time consuming and may have potentially been biased if the charts that happened to be pulled belonged to patients who were in good control of their respective conditions.

One advantage of having computerized records is that the EHR can provide a more accurate picture of how your practice is performing on its selected quality measures.

This flowchart is an example of how reporting could look like using the example of % of patients with diabetes with an A1c greater than 9.

The process begins on a certain date, we chose arbitrarily that this process would begin 7 days before the reporting deadline to give the practice plenty of time to figure out how to do it. This means that the practice should be well aware of when CMS or your state requires the report.

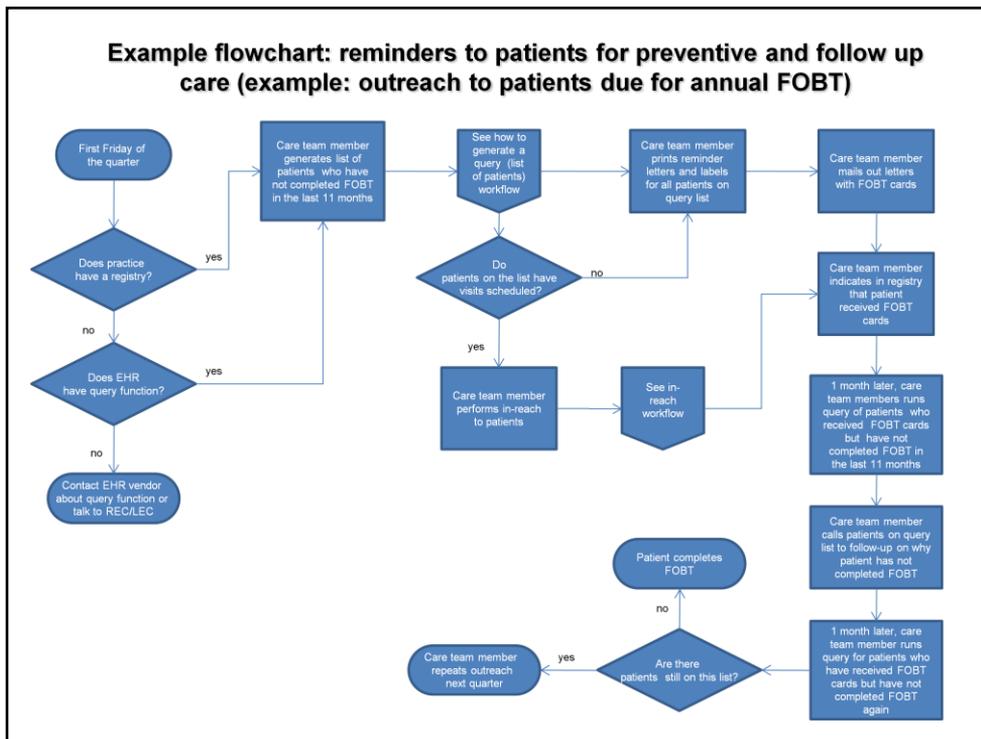
The main decision point in this process is whether or not your practice has a registry. For those of you unfamiliar with what a registry is, it is a database that contains patient health information. If your practice does not have a registry, speak to your HER vendor about the reporting capabilities of your HER because some come with registry functions like building queries.

If your practice does have a registry, is someone on your staff data savvy or familiar with data reporting? A practice manager may most likely take this function on, but that is completely up to your practice. If there is not a person familiar with data reporting, your local extension center or your regional extension center may be available to provide training, although this may delay reporting. Your practice may consider training a staff member on data before the EHR arrives.

Registries can run queries or searches for a list of patients that fit certain criteria or registries can create reports, which provides statistical information about the patients. Having pre-made reports in your registry by pass the steps of running queries individually to find numerators or denominators. Using a concrete example here of calculating the percent of diabetes patients with a1c greater than 9, if your practice does not have pre-made reports in the registry, the data reporter would first run a search for the number of patient who had diabetes, the denominator, then run a search for the number of diabetes patients with an A1c greater than 9 the numerator. A report would be able to give you the numerator and denominator at the same time.

After finding the numerator and denominator, the data reporter can plug these numbers into an excel sheet and can calculate the percentage of diabetes patients with a1c greater than 9 by dividing the raw number of patients with a1c greater than 9 by the total number of diabetes patients.

The data reporter would then send the report to CMS.



This workflow demonstrates how a practice can send patients reminders for preventive care or follow up care. This is something practices may not be used to as it asks practices to take a proactive approach to care.

This is an example of how a practice can provide reminders to patients who are due for their annual FOBT. This meaningful use requirement is again dependent on whether your practice has the ability to generate a list of patients using a registry or HER. Without this list of patients who are overdue or about to be due for services, meeting this objective may require tracking the dates of when patients receive certain services on an excel sheet, more work than needed.

Contact your EHR vendor about query functions or consider getting a registry or contact your Rec or lec on ideas how to generate this list.

In this example, this process takes place on the first Friday of odd numbered months. The frequency of when your practice sends out reminders is arbitrary but determining a concrete schedule of when your practice performs these tasks is helpful because it normalizes the behavior of performing a new function like outreach and it makes performing the outreach more manageable because there will be fewer patients to contact at one time.

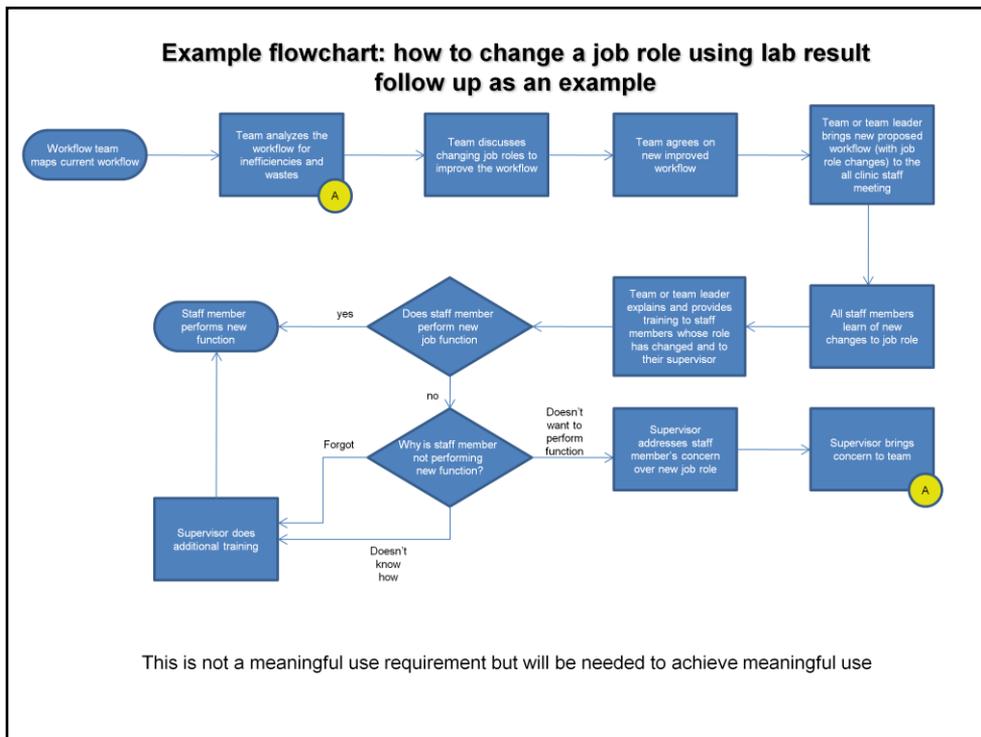
In our example, the care team member uses the registry to generate a query of patients who have not completed an FOBT in the last 11 months. Although the US preventive service task force recommends that FOBT is performed once every 12 months, if you run a search for patients who have not had an FOBT in the last 11 months, this allows your practice to catch those patients before they are due instead of just screening patients who are perpetually late!. This gives patients a one month window to complete the FOBT.

How to generate a workflow is another process so we will make a reference to it here rather than explain it.

After the care team member generates the list, they must decide how to contact patients. The two options would be to call patients or mail out a letter. Mailings are generally less time intensive because letters can be printed at all at once. Whether your practice decides to make calls or mail out letters, it is necessary to track in the patient's record that correspondence was made. In a future step one month later, the care team member will be running another query on patients who have received contact but have not completed an FOBT. This allows practices to focus efforts on patients who may have received a phone or a letter but for some reason may not have come in to complete their care service. Ask your HER vendor if this is something that can be tracked.

After running the query of patients who have been contacted but have not completed an FOBT, the care team member will call those patients to remind them to complete the FOBT.

1 month after the follow up phone calls the care team member can run the same query (the patients who have received a letter but not completed FOBT query) again. If there are still patients remaining on this list, that means these people will be outreached again to the next time the process starts. Patients no longer on this list have completed their FOBT for their year. If there are still patients remaining, they have still yet to complete their FOBT and will be outreached again to during next quarter's FOBT outreach.



The last workflow map that we will discuss is how to change a job role. This is not a meaningful use objective, but as we have shown in the previous workflow examples, a lot of the meaningful use objectives will require practice staff to take on new or different roles to help the practice achieve high quality use of the EHR.

This example discuss one possible way of redefining the job duties of existing staff members using the previous example 1 of the lab result follow up process.

Before any job roles can be changed, the EHR implementation team will need to map out the current workflow. After mapping out the workflow, the team will need to analyze the workflow map for inefficiencies and wastes and then the team discusses potential changes to improve the process, which will likely involve changing job functions. In the lab result follow up workflow from example 1, the workflow team got rid of the MA making 3 copies of the lab result and implemented a protocol for the RN to handle lab results.

After the team agrees on a proposed future workflow, the team leader or another representative will need to bring the new proposed workflow map to an all clinic staff meeting so that all staff members of the practice are aware of the new changes that are being implemented in the clinic. If only half of the MAs and RNs attended the all staff meeting, half of them would operate using the old bad workflow while the other half would do the new better workflow. You could see how this situation could potentially lead to more chaos.

After the new job roles are presented at an all staff meeting, the team leader or representative will then have to clearly explain to RNs and MAs (or whomever it is whose job role has changed) and to their supervisor or supervisors what exactly is expected of them in the new workflow. The purpose of educating the staff's supervisor is to create a method for accountability.

Then the process goes into a decision point, does the staff person perform their function, if it's a yes, then you have successfully changed the job role. If the answer is no, the reason why that staff member did not perform the new task must be addresses. If the RN still handed the lab result to the Clinician is it because they forgot that there is now a protocol? is it because the RN doesn't know how to follow the protocol? or is it because the RN doesn't want to perform the function? If it is the former two reasons (forgot or don't know how" more training is needed. If the staff member doesn't want to perform the function, their supervisor would need to address the staff members concern as to why they don't want to perform the new function? In the improved lab result follow up example, the RN is now in charge or calling patients about normal and mildly abnormal labs. Maybe the RN's can't make the phone calls because they aren't given enough time.

The supervisor can then bring this concern to the workflow team to propose a new workflow that satisfies everyone.

Conclusion

- **Workflow mapping is a great tool to help implement EHR and achieve meaningful use**
- **EHR adoption does not equal meaningful use**
- **Workflow maps are a tool to improve care for patients, improve efficiency in practice, and redistribute work and job roles**

Module 19: Implementing Care Teams

A. Team Visualization Exercise

Activity 1: Team Visualization Exerciseⁱ

The goal of this exercise is to illustrate how the current models in most primary care practices do not function as team-based care. When working with your practice, be sure to get all care team members to participate. Each staff member will be given 60 jelly beans and a short, clear plastic cup. Also have a cup in the middle labeled “No one.”

- Ask the group which staff member performs each of 10 tasks (listed below).
- Instruct all staff members to drop a jelly bean into **each** staff member’s cup who they think **currently performs** that task.
- Instruct staff members to drop a jelly bean into the “No one” cup if they don’t think anyone currently performs that task. For example, if a staff member thinks a task is currently performed by two physicians, a nurse practitioner, and a physician’s assistant, that staff member would put a jelly bean in each of the cups of those four providers.

Ask which staff member:

1. SETS the intervals for blood monitoring for patients on warfarin?
2. DECIDES when to call a patient with diabetes to come in for a visit?
3. SELECTS the vaccines to be given to an 18-month-old baby?
4. DECIDES to arrange a diabetes retinal screening referral?
5. ORDERS the mammogram for a 55-year-old woman with severe hypertension and heart disease?
6. INITIATES diabetes microfilament foot testing to prevent amputations?
7. FINDS patients with severe persistent asthma who are not on controller medications and brings them in for an appointment?
8. DECIDES which children with ADHD should come for a visit?
9. DECIDES when a patient with major depression (PHQ 17) should come back for a visit?
10. ADMINISTERS Screening, Brief Intervention, and Referral to Treatment (SBIRT) screening to patients in your practice?

At the end of the exercise, the group will probably discover that most of the jelly beans end up in the primary care providers’ cups. Facilitate a discussion using the following prompts:

- What did you observe about this exercise? What did you learn from it?
- What implications do you think this has for you all as a care team?
- Why are there jelly beans in the “No one” cup? What can you do about that?
- What should the distribution of jelly beans look like to be real team-based care?
- What changes would you need to make to how you are currently practicing to do this?
- How would this affect your workflow?
- Are there goals you want to include in your quality improvement plan based on this exercise?

ⁱ Provided by Carolyn Shepherd, M.D., Clinica Campesina, and used with permission.

Module 19: Implementing Care Teams

In a Perfect World: Task Reassignment Exerciseⁱ

Date:

Practice:

Facilitator:

Participants:

Task	Who Does It Now?	In a Perfect World, Who Would Do It?
Book appointments		
Take incoming calls		
Chart preparations		
Triage		
Medication refill requests		
Check in		
Suture removal		
Dressing change		
Flu shots		

ⁱ Adapted with permission from Institute for Healthcare Improvement, Cambridge, MA.

Module 20: Facilitating Panel Management

A. Empanelment Exercise

Practice Empanelment Exercise

Name:

Date:

Information on patient visits to clinic in past year

Patient	Provider 1	Provider 2	Provider 3
John	1*	3	1
Lisa	1	1*	1
Nancy	2*	0	0
Lucy	1*	4	5
Samantha	1	4*	5
Timothy	2	2*	4
George	1	3	2
Michael	1	1	1*
Bianca	0	0	2*
Carl	1*	1	2

* Last provider seen

Where would you obtain these data for a practice?

Assign patients to a panel based on data above

Patient	Provider 1	Provider 2	Provider 3
John			
Lisa			
Nancy			
Lucy			
Samantha			
Timothy			
George			
Michael			
Bianca			
Carl			

Module 20: Facilitating Panel Management

B. Panel Management Training

By Dr. Thomas Bodenheimer, M.D., M.P.H., and Amireh Ghorob, M.P.H.

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Note: This document has been formatted for the Web. It has not been edited, except to correct typographical or grammatical errors.

Part 1: Introduction to Panel Management

What is panel management and population-based care?

Population-based care is a proactive approach to health care. By population we mean the panel of patients associated with a provider or clinic. Population-based care means that the provider or clinic is concerned with the entire population of its patients, rather than only those patients who happen to come in for appointments. The population might be only some of a provider's or clinic's patients; for example, the patients with diabetes or the patients with hepatitis B.

Panel management is the way in which we do population-based care. Panel management uses the patient registry to monitor patient care.

What is a registry?

Effective panel management relies on the availability of accurate and complete information in a patient registry. The registry is a database that stores patient health care information. The registry is a list of the names of all the patients of a provider or a clinic, with medical information about each patient. The registry can be searched to give feedback to a clinic and a clinician on performance measures; and identify patients overdue for mammos, paps, HbA1c or LDL blood tests, eye exams, etc. The registry can also identify patients not in control of HbA1c, LDL, or blood pressure, and patients who need more coaching or more extensive planned visits with an RN or nutritionist.

Some information in a registry is entered electronically from a laboratory or from the electronic medical record of a clinic, for example, patient demographic information, diagnoses, and lab values such as HbA1c and LDL cholesterol. Other information may need to be input by someone in the clinic, for example, blood pressure, weight, and BMI.

Although many clinics have a registry available, often the registry is not used to its full capacity. That is why panel managers with protected time are needed to work the registry.

Who is a Panel Manager?

Ideally, a clinic team member (for example, a medical assistant) is trained to be a Panel Manager. The Panel Manager reviews the registry on a regular basis to make sure that patients complete their preventive and chronic care tasks on time (pap smears, mammograms, HbA1c levels, etc.), receive lifestyle counseling, and are prescribed and are taking medications. Panel Managers call and send letters and lab slips to patients who need lab work done and make appointments for eye exams, mammograms, pap smears, etc. In some cases, the Panel Manager works with clinicians to review patients' medications and contact patients to intensify

medications based on the clinician's orders. The Panel Manager may also have the job to enter data into the registry (like blood pressures) and to keep the registry up to date.

A Panel Manager can enormously help clinicians and patients by doing this work, which makes the Panel Manager a key person on the health care team.

In order for primary care clinics to use health coaching and panel management, they need to train coaches and Panel Managers. More importantly, they need to guarantee coaches and Panel Managers protected time. Ideally, the same people serve as both panel managers and coaches. All Panel Managers need health coach training since they perform outreach to patients.

Panel Management and Chronic Care

Sample Chronic Care Registry

Look at the example of a chronic care registry report. Any search criteria can be used to create a registry report based on a particular panel of patients with particular characteristics (clinic, clinician, last blood pressure, LDL or HbA1c value). In this sample report, patients in Column 1 represent the panel. The columns 2-12 represent the information that was selected by the person doing the search.

Group Activity

Use the chronic care registry sample and routine chronic care measures table to answer the questions below.

1. How many patients are in this panel?
2. What information is available on each patient?
3. What are some reasons that some fields are blank?
4. Which patients have HbA1c >7?
5. What does this mean?
6. How often should HbA1c be measured if the patient is at goal? And if not at goal?
7. Which patients have BP >130/80?
8. What does this mean?
9. How often should BP be measured if the patient is at goal? And if not at goal?
10. Which patients have LDL >100 and are diabetic?
11. What does this mean?
12. How often should LDL be measured if a diabetic patient is at LDL goal? And if not at LDL goal?
13. Which patients have LDL >130 and are not diabetic?
14. What does this mean?
15. How often should LDL be measured if the patient is not diabetic and is at LDL goal? And if not at LDL goal?

Team Activity

With your team, answer the questions below. Use the chronic care sample registry and routine chronic care measures table.

1. Review the values for patients A, B, C, and D.

- a. Which of these patients would you call to schedule a group blood pressure clinic appointment?
 - b. Which of these patients need to get labs done now?
 - c. Which of these patients are you most concerned about?
2. Review the values for patients H and K: Which of these patients are you most concerned about?

Role Play

Do a role-play with a partner. One will play the role of panel manager/health coach; the other will be the Patient D from the Chronic Care Registry. The coach will make a mock phone call to the patient and try to arrange lab slip pick up and an appointment.

After doing the mock call, both participants will provide feedback about the coach's role using the Panel Management Checklist.

Switch roles and repeat the mock phone call.

Panel Management and Preventive Care

Sample Preventive Medicine Registry

Panel management is an important way to help deliver preventive medicine. Registries can be set up to look at dates of most recent cancer screenings and other preventive measures. Information in this sample registry is organized to allow panel managers to contact patients who are overdue for colorectal cancer screening, mammograms, and the pneumococcal vaccine.

Group Activity

Use the preventive medicine registry sample and the routine preventive measures table to answer the questions below.

1. Why are some of the fields blank?
2. Which patients are overdue for colorectal cancer screening?
3. Which patients are overdue for a mammogram?
4. Which patients should receive a pneumococcal vaccine?

Team Activity

Colorectal cancer screening usually means having a fecal occult blood test (FOBT) every year or a colonoscopy every 10 years.

1. How does the panel manager know that a patient needs an FOBT?
2. As a team, write a colorectal cancer screening guideline to increase the colorectal cancer screening rate in this panel.

Sample Chronic Care Registry Report

SM = Self Management
Indicates if an action plan was created.

1	2	3	4	5	6	7	8	9	10	11	12
Name	DOC										IF SMOKES
Patient A	NO	2/21/2011	127	70	11/30/2010	93			NO	NO	11/20/2010
Patient B	YES	2/15/2011	110	55	2/15/2011	145	9/25/2010	11.3	YES	YES	2/15/2011
Patient C	NO	4/7/2010	158	87	4/11/2010	81	4/11/2010	6.7	YES	NO	3/15/2008
Patient D	YES	1/20/2011	148	95	12/14/2010	170	12/14/2010	8.9	YES	YES	12/12/2009
Patient E	NO	10/28/2010	129	72	12/10/2010	54	12/10/2010	9.6	YES	YES	3/30/2010
Patient F	NO	8/21/2010	125	88	4/20/2010	125			NO		
Patient G	YES	6/24/2010	149	85	4/16/2009	102			NO	NO	12/2/2008
Patient H	NO	3/5/2011	147	90	3/5/2011	81	3/5/2011	12.1	YES	NO	3/5/2011
Patient I	NO	1/29/2010	120	64	2/3/2010	65			NO	NO	12/22/2004
Patient J	YES	1/5/2011	117	81	1/5/2011	112	1/5/2011	5.9	YES	YES	7/5/2010
Patient K	YES	7/24/2008	152	85	7/14/2008	157			NO		

Most current date that blood pressure measured

Most current date that LDL cholesterol measured

Most current date that HbA1c measured

Indicates the most recent date patient was asked about smoking

Chronic Care Routine Measures Table

Chronic Care Routine Measures		
Routine Measure	Frequency	Goal
HbA1c	Every 3 months if not at goal	HbA1c <7% Frail patients: HbA1c <8%
	Every 6 months if at goal	
Blood Pressure	Every 3 months if not at goal	Systolic <130 Diastolic <80 (BP <130/80)
	Every 6 months if at goal	
LDL	Every 3 months if not at goal	Diabetics and/or CHD: LDL <100 All other: LDL <130
	Every year if at goal	
Smoking	Every year	"No"

Sample Preventive Medicine Registry Report

Preventive Medicine Routine Measures Table

1	2	3	4	5	6	7	8
Name	Phone Number	Age	Sex	Date of Pneumovax	Date of FOBT	Date of Colonoscopy	Date of Mammogram
Patient A	(415) 555-0179	76	F	12/22/2007	5/11/2008	10/24/1995	12/15/2005
Patient B	(415) 555-0134	55	M		7/21/2009		
Patient C	(415) 555-0110	65	M				
Patient D	(650) 555-0189	52	F		8/14/2010		9/30/2008
Patient E	(415) 555-0143	53	F		12/6/2010		12/18/2010
Patient F	(415) 555-0123	58	F				5/28/2009
Patient G	(650) 555-0112	55	M				
Patient H	(650) 555-0150	42	F	6/10/2009			10/21/2010
Patient I	(415) 555-0175	68	M	2/3/2008	7/28/2010		
Patient J	(415) 555-0120	62	M			3/27/2007	
Patient K	(415) 555-0130	75	F	7/14/2010		1/17/2002	8/22/2004

Preventive Care Routine Measures Table

Preventive Care Routine Measures		
Routine Measure	Who should get it?	Frequency
Pneumococcal vaccine	Adults > 65 years old	Once*
Colorectal Cancer Screening	Adults 50-75 years old	FOBT once a year or Colonoscopy every 10 years
Mammograms	Women 50-74 years old	Every 2 years

* Patients with diabetes and some other conditions need the vaccine once before age 65 and once after age 65.

Part 2: Creating clinical practice guidelines

How are clinical practice guidelines (standing orders) created that inform the panel manager when a care gap exists?

A care gap exists when a patient is overdue for a service that should be done periodically. For instance, a care gap exists when a patient with poorly controlled diabetes has not had an HbA1c test in over 3 months.

A care gap exists when a patient is above goal for a particular disease. For example, if a patient's goal for diabetes control is an HbA1c of 7 or below, a care gap exists if the most recent HbA1c is greater than 7.

How does the panel manager know the guidelines that determine whether patient is overdue for a service or whether the patient's disease is in poor control?

The national guidelines, created by the American Diabetes Association, indicate that patients with diabetes in poor control should have an A1c test every 3 months, and patients with diabetes in good control should have an A1c test every 6 months. Each clinic needs to decide whether they will use those national guidelines or create different guidelines. The guidelines (also called standing orders) need to be established and put into writing by the medical director or by the agreement of all the clinicians. Panel managers need to be trained to understand those standing orders.

Team Activity

Read the example standing order below. With your team, answer the questions that follow.

Panel managers should check the registry every month and identify all patients with diabetes with HbA1c above 7 who have not had an HbA1c in 3 months. Send an HbA1c requisition to the lab for those patients, and send the standard HbA1c lab letter to those patients with a follow-up phone call in 2 weeks for those patients who have not yet gone to the lab.

1. You are the panel manager. How would you fill out the lab requisition and how would you get it to the lab?
2. How would the panel manager know which patients have an HbA1c goal of 8 rather than 7?

Group Discussion

Discuss reasons behind exceptions to routine follow-up.

Team Activity

Activity 1: Create a standing order to increase the percentage of patients completing colorectal cancer screening at your clinic.

Activity 2: Create a standing order to improve health outcomes for diabetes patients at your clinic.

Key messages

1. Some patients are exceptions to standing orders.
2. Each clinic must figure out a way to identify patients who should not receive the routine follow-up.
3. Decisions on which patients are exceptions should be made by clinicians, not by panel managers.

Part 3: Outreach

What is outreach and how is it provided?

After the panel manager has identified care gaps, outreach is done by mailings and phone calls to close the gap. Outreach is the best option for patients who do not have appointments in the near future.

Outreach Letter

Below are two example letters. We will read each letter and discuss.

Example 1

Dear Mr. Rojas,

We need you to come to the lab for an A1c blood test. Our records show you are overdue for this lab. Please come in or call me as soon as possible.

Sincerely, Diana

Group Discussion

Is this a good letter? Why or why not?

Example 2

Dear Mr. Rojas,

Dr. Alvarez asked me to write you because it is time for you to have another lab test for your diabetes. This test is called A1c. This measures your average blood sugar for the past 3 months.

The last time we checked your A1c, it was too high, meaning that your diabetes was not in good control. We repeat this test every 3 months if your A1c is high.

An up-to-date A1c can guide our work together to help you take care of your diabetes.

You can go directly to the lab. I have sent the lab a slip with your information. Should you need help or have questions about the test, please call me.

Best wishes, Diana from Dr. Alvarez' team

Group Discussion

Is this a good letter? Why or why not?

Outreach Phone-Call Script

Below are two example phone-call scripts. We will read each script and discuss.

Example #1

Hello Mr. Rojas, this is Diana. [Hello, who is this?]

Oh, I sent you a letter 2 weeks ago about getting new labs, but it looks like you didn't go. We need you to go to the lab because it is really important for your health. [I haven't gone because I haven't had a chance yet.]

Could you go to the lab tomorrow to get your A1c test? [No, I work tomorrow.]

But it is very important for your health that you go. Don't you want to take care of your diabetes? [No.]

Group Discussion

Is this a good phone call? Why or why not?

Example #2

Hello Mr. Rojas. This is Diana, calling from Dr. Alvarez' office.

[Oh, hello.]

Is this a good time to talk? [Yes.]

How are you today? [I am doing OK.]

Dr. Alvarez asked me to call you because it is time for you to have a lab test for your diabetes. The test is called A1c. Do you know what the A1c test is? [No.]

It is a measure of your average blood sugar for the past 3 months. [Oh yeah, my sugar test.]

Do you remember what your last test showed us? [It was too high?]

That's right, the last time we checked your A1c, it was too high, meaning that your diabetes was not in good control. If it is okay with you, we'd like you to come in to get a new A1c test so we have a guide to help you take care of your diabetes. Would that be OK? [Yes, I can come in. Where do I go?]

Just go to the lab. I have sent a lab slip to the lab so they know that you will be coming. When do you think you could come? [Next Wednesday, when I don't have work.]

Great. Do you have an appointment with Dr. Alvarez anytime soon? [No.]

It would be good to have an appointment a week or two after the lab test. Let's help you set up an appointment now.

Group Discussion

Is this a good phone call? Why or why not?

Role play

Do a role-play with a partner. One will play the role of panel manager/health coach; the other will be a patient. Use the scenarios below to do outreach. Do scenario 1 and then switch roles and do scenario 2.

Scenario 1: Ms. Gonzalez is a patient who has diabetes, A1c of 9.5, and has not had an A1c test for 6 months. Ms. Gonzales is motivated to improve her diabetes but does not understand her disease very well. Make a phone call to ask the patient to come to the lab for an A1c test.

Switch roles.

Scenario 2: Mr. Rojas has diabetes, A1c done 1 year ago of 10.2. He has not had an appointment for 5 months. He appears resistant about caring for his diabetes. Make a phone call to ask the patient to come to the lab for an A1c test.

Part 4: In-reach

What is in-reach and how is it provided?

In-reach is for patients who do have an appointment soon and for patients who drop in for care. In-reach takes advantage of the patient being in the clinic to try to close the care gap.

In-reach can be done regardless of what the patient has come to the clinic for. During an eye appointment, a podiatry appointment, or a social work visit (or any other visit), the optometrist, podiatrist, or social worker would look at the screen and see what can be done to close the care gap.

In-reach works best if the electronic medical record has a panel management screen that indicates whether a patient has a care gap (for example, a woman 60 years old who has not had a mammogram for 3 years) or is in poor control of a chronic condition (for example, a patient with

high LDL cholesterol who has not had a cholesterol blood test in 2 years). With this electronic panel management tool, in-reach can be done by the medical assistant during the rooming process. For example, if the patient is overdue for a mammogram, the medical assistant writes a mammogram order and makes an appointment for the patient to get a mammogram.

If there is no electronic medical record with a panel management screen, medical assistants can review the chart during the rooming process to determine if the patient has a care gap (preventive or chronic care) and try to close the care gap.

Do panel managers always implement standing orders exactly as the orders are written?

For effective panel management to take place, panel managers need to exercise some clinical judgment. For example, you can have a standing order that says every patient with diabetes needs an LDL-cholesterol test every year, but what does this really mean? If a patient comes in for an appointment in September 2010 and the last LDL was in November of 2009, does the panel manager wait until November 2010 to order an LDL or should he/she order one now even though the patient received an LDL test 10 months ago?

Group Discussion

Should panel managers have some discretion or should they only implement the standing orders exactly as written?

Role play

Do a role-play with a partner. One will play the role of panel manager/health coach; the other will be the patient. Use the scenarios below to do outreach. Do scenario 1 and then switch roles and do scenario 2.

Role play #1: Ms. Phillips is 60 years old and has not had an FOBT in 2 years and has never had a colonoscopy. The medical assistant discusses having Ms. Phillips get an FOBT.

Switch roles

Role play #2: Mr. Johnson comes in for a podiatry appointment. Mr. Johnson has diabetes with A1c done 3 weeks ago that is 9.6. Clinical practice guidelines agreed upon by the clinic leadership say that patients with A1c levels above 8 should get a one-hour appointment with a health coach. The medical assistant in the podiatry clinic has seen the panel management screen and knows that Mr. Johnson has a care gap about his diabetes control.

Part 5: Implementing panel management

How do panel managers get the training and the time to meet their responsibilities to their patients?

Each clinic's leadership after consulting with clinicians and staff needs to decide its panel management priorities. This partly depends on which conditions are entered in the registry. Some registries only include patients with diabetes; it would be difficult for a clinic with only a diabetes registry to do panel management for preventive care.

If the registry includes patients with diabetes, hypertension, hepatitis B, cervical cancer screening (PAP smears), breast cancer screening (mammograms), and colorectal cancer screening, then the clinic would need to decide its priorities based on how many patients are at risk for these different conditions and how much panel management time is available.

Panel managers need training for those conditions the clinic has decided are its priorities. The clinic leadership, or a quality improvement committee, may change priorities from month to month and make sure that the panel managers are trained to carry out each new priority.

Team Discussion

What types of patients can your clinic focus on? Based on this focus, create your clinic's priorities.

Models of Panel Management

There are two models of panel management that can be implemented to provide time for panel managers to do their work. One is the **specialized panel manager model**. In this model, one or two people (usually medical assistants) are trained to be full or half-time panel managers. During their panel manager time, they do *not* do medical assisting. The panel managers are responsible for the panel management of all patients in the clinic who need panel management.

The other model is the teamlet model. In this model every medical assistant in the clinic is trained to be a panel manager, and every medical assistant spends part of their time doing panel management. Each clinician is paired up with a medical assistant—who is also a panel manager—in a two person team, called a teamlet. The teamlet, not just the clinician, is responsible for a panel of patients. The responsibility of the medical assistant/panel manager is to provide the panel management only for that panel of patients.

Team Discussion

1. Which of these models do you prefer for your clinic?
2. What are some barriers to implementation?
3. What are the solutions to these barriers?

Module 20: Facilitating Panel Management

C. Sample Policies and Procedures

Community Clinic Policy Title: Panel Assessment and Maintenance Manual: Clinical	Policy File Name:
	Page 1 of 4
	Original Date:
	Revision Date(s):
	Approval Date:
	Effective Date:
	Policy Created/Revised By:

Purpose

To link each primary care patient with a Primary Care Provider (PCP).

Goal

To increase patient and provider satisfaction, improve continuity of care, and improve delivery of care.

Procedural Steps:

1. PCP Assignment Roles and Responsibilities

Clinic Manager:

- Reviews PCP assignments for team providers monthly.
- Addresses discrepancies in PCP assignment and unassigned patients seen by team provider.
- Tracks visits with PCP versus other providers (“Continuity Report”).
- Determines whether panel is open/closed based on ideal panel size provided by the IT Panel Support.
- Follows up on patient requests to change providers.

IT/Data Analyst:

- Provides Clinic Managers an Ideal Panel Size report on a quarterly basis.
- Provides Clinic Managers an Actual Panel Size report on a monthly basis.
- Provides Clinic Managers with a monthly report of unassigned patients.
- Provides a PCP Discrepancy report that tracks visits with PCP versus other providers (“Continuity Report”).
- Informs the Call Center, AMD, DOO, Clinic/Nurse Managers, and CMO of closed panels.

Nurse Manager

- Whenever a provider leaves, the NM will coordinate a Transition Team Meeting consisting of the following staff: Billing Manager, Clinic Manager, Data Analyst, AMD/CMO, and Call Center lead to: evaluate patient needs in collaboration with team; reassign patients to other clinic providers according to panel capacity; and notify affected patients.

2. Assigning Patients

New Patients

Call Center:

- Schedules patient visit for next available/open provider panel.
- Call all new IPA enrollees with a followup letter if there is no response to schedule initial assessment visit with their assigned PCP.

Front Desk Specialists:

Registration-related duties:

- Assigns PCP in practice management system when new patient checks in during first appointment.
- Registration/Discharge places PCP label on medical chart with Provider/Team name.
- Provides the Patient Handbook to new patients.

Discharge-related duties:

- Confirms assignment with patient. If patient requests different provider or if provider requests change, facilitates change of assignment only to an open panel. (Please refer to PCP Assignment Change.)

Unassigned Patients Previously Seen

Front Desk Specialists:

Registration-related duties:

- Based on the four-cut method, determines who their PCP is and makes the assignment in the practice management system.
- Assigns to PCP using the “four-cut” method unless patient requests different assignment.
- Confirms PCP assignment at check-in.
- If patient requests PCP change, staff will immediately contact the Clinic Manager.

Discharge-related duties

- Reviews PCP assignment and confirms with patient and provider, and changes assignment as indicated.

- If request is made to change to a Panel that is already full, immediately contact the Clinic Manager.
- Confirms PCP assignment when making appointments.
- Confirms PCP assignment with new patients.
- Resolves discrepancies with provider assignment for established patients, contacts Clinic Manager.
- Changes PCP assignment upon request by provider or management team.

3. PCP Assignment Change

Patient who wants to change PCP assignment within the same clinic:

- Discharge and/or Registration staff: Facilitates the PCP change (in practice management system), unless the panel of the provider the patient is requesting is full. If the patient or provider does not agree with the request for change, defer to Clinic Manager and AMD as needed.
- Inform the patient and providers of the change through email.
- Clinic Manager: If patient has a provider preference regarding gender, then change can be made; otherwise, consults with current PCP. If transfer is approved, confirms acceptance by new PCP (should include PCP-PCP communication).

Patient requests transfer to PCP at different clinic:

- Discharge: Will make change to an open PCP panel at patient's desired location.
- Clinic Manager: Consults with current PCP. Reviews patient's history (# of PCP changes, no-shows, number of clinic transfers).
- Provider: Notes request to change on the discharge form and will consult with the referring provider, if available or known.
- Discharge staff: Informs patient of new PCP and ensures PCP reassignment in practice management system.

PCP requests transfer to a different clinic:

- Discharge: Will make change to an open PCP panel at patient's desired location.
- Clinic Manager: Consults with current PCP. Reviews patient's history (# of PCP changes, no-shows, number of clinic transfers).

4. Patient Notification of Provider Transfer or Termination

In the event of a provider transfer or termination, each clinic site will take responsibility for notifying patients.

CMO and AMD:

- Notifies Clinic Manager, Nurse Manager, IT, Billing Manager, and Call Center Manager of the provider leaving within 2 weeks of receiving notice.

Information Technology Panel Support Staff:

- Provides the Clinic Manager a list of patients assigned to the provider, patient letters, and optional mailing labels, if needed.
- Upon request, provides PCP/team with panel list.

Call Center:

- Eligibility will provide the IPA Disenrollment list to Clinic Managers on a monthly basis. (Note: The list produced will be from the month prior.)

Clinic Manager:

- The manager will ensure that the computer is updated with the revised PCP information. Standard personalized letters will be sent from the provider to notify patients of the transfer or termination. Patients should be told that the clinic will notify them when their PCP has been replaced. Until reassignment occurs, patients will be seen by the appropriate provider as determined by the clinic manager in coordination with the other providers at the site.
- Will inactivate account of disenrolled IPA patient in practice management system.

Billing Manager:

- Assigns PCP a new provider number in practice management system when a new PCP is hired or when caseload needs to be reassigned to new provider. Clinics will be responsible for reassigning the patient to a new PCP within the clinic site.

Module 21: Improving Self-Management Support

Self-Management Support Tasks and Assignments

Role Visualization Exercise for Self-Management Support

Complete the chart by describing what each team member will do for each of the listed tasks for self-management support. Not all team members will be involved in each activity, nor is the list of tasks exhaustive.

Role	PCP	Nurse	MA	Clinical Care Manager	Dietitian/PT/OT	Administrative Staff/Patient Navigator	Other
Introduce SMS, describe roles							
Set visit agenda							
Collaborate on patient goal setting							
Provide information and skills training to patients							
Create an Action Plan							
Connect patients with resources in community and elsewhere in health system							
Oversee disease registry/proactive followup							
Conduct previsit chart reviews							

Adapted with permission from Institute for Healthcare Improvement, Cambridge, MA.